

Encouraging signs in the midst of uncertainty

Macroeconomic Context · Variation in pricing and discounts · Impacts on TCO · Delivery times · Downtime



"In our opinion, the one big question for 2023 is: How fast will the inflation curve be corrected?"

Globally, the year 2023 will be remembered for a slowdown caused by the inevitable "digestion" of three events: the persistent war in Ukraine, stubbornly high inflation and the ensuing need for monetary restraint. In view of this base scenario, data from the first months of the year even suggest that the risk of congestion is lower than that anticipated at the end of last year since, generally speaking, business has endured better than expected.

In fact, as we will see below, **inflation has already started its downward trend**. The increasingly more pervasive cash crunch (caused by interest rate hikes), the surprising soundness of the job market, the cushion of savings generated since the pandemic and the normalizing of obstacles in the energy supply have yet to break the clouds of economic and political uncertainty, but suggest that the economic slowdown expected in 2023 will be smaller than once thought.

In our opinion, the one big question for 2023 is: **How fast** will the inflation curve be corrected? While inflation has already started to go down, leading analysts tie this to corrections in energy prices, which will be even higher

in 2023, based on lower gas futures in Europe; however, there is a second component to the inflation rate, associated with energy market raw materials, whose performance has been more idle and lethargic: we are talking about the prices of food, particularly unprocessed food, which have seen a major escalation from December until now.

Given this context, a number of fleet managers have approached us with questions such as "Could we actually be seeing some positive signs in the economy? And will they be long-lasting?" The data still show instability in terms of economic activity. But they also suggest that its weakness is not as patent as was once anticipated. In view of these hesitant signs of optimism, "How will the budget of my fleet be affected? Will interest rates keep rising? What other components of the costs of using my fleet should I pay attention to?" These are just some of the questions seen on the horizon by fleet managers trying to navigate through this phase.

In this second edition of the Quarterly Newsletter, we hope to address some of these issues, and offer tips to help our customers make the best decisions.



Macroeconomic environment:

will all economic indicators continue to be negative?



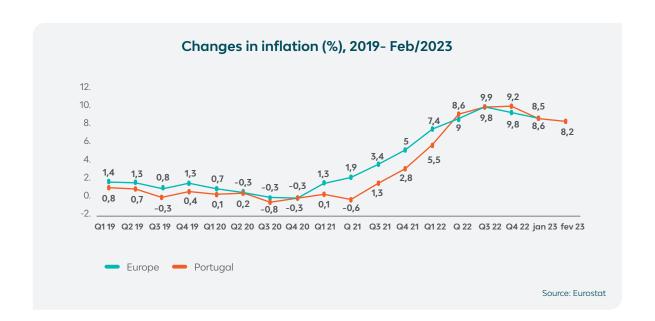
Inflation is slowing down. But at what speed for the rest of the year?

Everyone knows that inflation is considered to be one of the main barometers of the world economy. Through the third quarter of 2022, it was clearly the most decisive factor in this turning point we are experiencing, due to its constant increases. From the first quarter of 2021 to the third quarter of 2022, inflation saw consecutive rises, in most cases is quite sharp. However, it has been going down since the last quarter of the past year, as shown in the graph.

In fact, January saw a drop of 1.2 p.p.in Portugal and 0.7 p.p in Europe; now in February, there have been four more decimal points of slowdown. In other words, for the third month running, Statistics Portugal (INE) recorded a drop in the consumer price index (CPI), pointing to a year-on-year figure of 8.2% in February (see table on the next page).



"According to leading analysts, the decrease in the global index is rooted in the decline in energy products."



According to leading analysts, the decrease in the global index is rooted in the decline in energy products. In fact, the 2023 scenario for energy products is one of a downward correction, reflecting what is happening in the gas and crude futures market. Even so, this will not keep inflation from remaining high: the increase in the global price index will continue to mirror the contagion of more expensive raw materials on other goods and services, in general, namely the cost of food products, which represent the component with the most weight on the CPI basket (around 20%). In addition to its relative weight, this component is extremely important: not only does it include essential products with higher effects on low-income families, but it also helps to shape consumer expectations about future inflation.

At a global level, this component was up 12.9% in 2022, well above the 7.8% of global inflation. That said, according to the FAO¹, the food price index saw some relief between June and December 2022. However, this did not hold true in Portugal: in addition to 2022 having been

the hottest year since 1931, with negative consequences on agricultural production and the available supply in our country, supply constraints in the global market caused by the war in Ukraine and higher logistics and transport costs are still putting pressure on the prices of food products in Portugal².

We know that the tools available to central banks are showing the first positive signs of response to these efforts. But will the downward curve in the CPI continue, or will the speed of the decline lessen over the year? The majority of analysts are still cautious: considering that it still remains high, and given the persistence of its core component, inflation will decrease over the year slowly, with even the most optimistic proposing an underlying rate between 3% and 5%, and the most conservative more than 5%. Note that, since we are currently at a price plateau, which resulted from the average increase of 8.1% in 2022, even a 5% rise over this base represents a considerable effort for companies and for households.

¹Source: Food and Agriculture Organization of the United Nations

² Source: BPI Research, Dossier | Special on inflation: is it here to stay?, February 2023



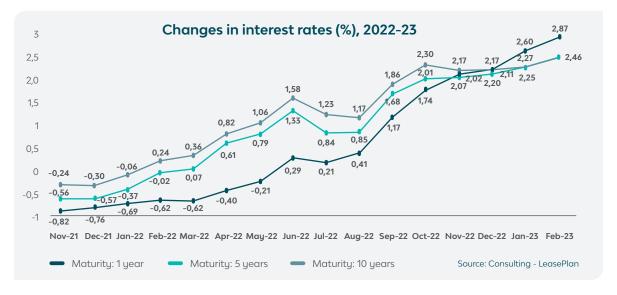
"The prospects for 2023 are still marked by strong conditioning factors on demand in general."

1.2. Interest rates

Although the outlook for this year is not quite as worrisome as expected at the end of last year, the prospects for 2023 are still marked by strong conditioning factors on demand in general. We expect a slowdown in consumption, with inflation persisting at historically high levels (as we have seen above), but above all a sudden and dramatic rise in key ECB interest rates.

As previously mentioned in the first edition of our Newsletter in December, in order to curb inflation, the most effective option available to the European Central Bank is interest rate hikes. Perhaps we weren't expecting as many hikes as we have witnessed. But the truth is, although inflation is far from peaking, its underlying prices hit a record high of 5.3% last month³, heightening the management risk of the ECB, whose mission is to keep growth in the general price index at around 2%.

In fact, the last quarter of 2022 and first quarter of 2023 saw interest rate hikes. If we look at the graph⁴ to the side, rates with a one-year maturity went from 1.74% in October 2022 to 2.87% in February of this year, up 65% in just five months. This interest rate hike comes in the wake of the ECB's monetary policy which, in addition to the increases at the end of last year, raised the rates of principal refinancing transactions by more than 100 base points (50+50), to the current 3.5% in early February of this year and, more recently, on 17 March. Could the increases in key interest rates remain here? The ECB's position has been conservative/prudent, so that markets anticipate another 50 base points in increases before the end of summer. In view of this scenario, some central bank presidents with an ECB seat assert that a new rate hike before summer will likely entail a restriction on economic growth.



Economic growth, consumer confidence index and unemployment

If, on the one hand, we might hope that the prognoses of recession resulting from this interest rate hike do not actually bear themselves out, on the other hand we do have some positive economic indicators: unemployment, economic growth and the consumer confidence index have shown positive signs offering some encouragement to the majority of economic agents, especially when compared to other recent periods of crisis (2009-2010) whose scenarios were even more destabilizing than the current ones.

³ Source: Reuteurs, 24 Feb 2023

⁴Source: Eurostat



"The initial data from 2023 suggest that the Portuguese economy may avoid a contraction in the first quarter."

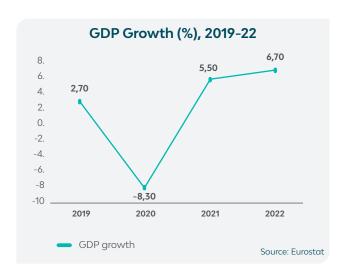
1.3.1.

Economic Growth

The 2022 results were surprising to all of us, with vigorous growth of 6.7% compared to 2021. Even the most cynical will say this is largely explained by the more hesitant growth of 2021, below the European average. But in fact, even considering the more anaemic performance of 2021, the Portuguese GDP is 3.3% higher than in 2019 (pre-pandemic), compared to 2.3% in the euro area⁵.

The initial data from 2023 suggest that the Portuguese economy may avoid a contraction in the first quarter, thanks to the more benign performance of energy prices and the resilience of euro area economies, where our main business partners are found.

While last year, the prediction was that we would not escape a recession (however minor) in 2023, today's leading analysts expect the economy to grow around 1%, which still represents a major slowdown compared to 6.7% in 2022, reflecting the higher interest rates in the euro area



and the loss of purchasing power among house-holds and companies.

As a result, the macroeconomic backdrop undoubtedly remains uncertain, although analysts acknowledge that 2023 now presents risks that are a bit more "calculated".

1.3.2.

Consumer confidence index

The consumer confidence index is another indicator that has been strongly affected by our current circumstances. In 2022, we hit historical lows, even worse than those of the pandemic. In January of this year, however, we saw a positive sign in this indicator.

While in the last quarter of 2022, the figures for consumption decisions hit historic lows, there was a slight improvement in this indicator in January

2023, reflecting the consumption considerations of households and companies alike.

Among consumers, confidence recovered to levels from September 2022. The improved economic sentiment in the industry also recovered by 2.6 points⁶, highly leveraged by the above-mentioned control of energy prices and performance of inflation in general.



⁵Source: Eurostat, Real GDP per capita



"Esta tendência de crescimento do desemprego em Portugal está a contrariar uma tendência de estabilização que se verifica na União Europeia."

1.3.3. Unemployment

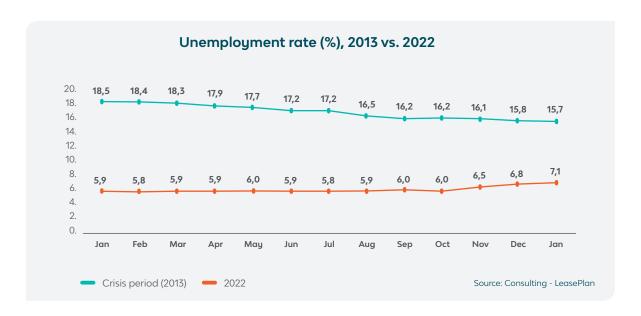
Since November 2022, the unemployment rate has been on the rise, reaching 7.1% in January of this year. Comparatively speaking, this figure was 6.8% in December and 6.5% in November. The figure from January is the highest since November 2020 (7.3%). This indicator was largely affected by youth unemployment, which was up almost 3 p.p., from 17.9% in October to 20.5% in January.

This growth trend of unemployment in Portugal goes against a stabilization trend occurring in the European Union and euro area; there is a clear need to monitor this indicator which, although far from the peak of 17.1% in the average

from 2013, is showing clear signs of reversing the trend.

This point is quite relevant in that, in the opinion of most economists, it is the resilience of the labour market that has supported the economy's more positive performance.

Could we now be seeing the positive signs of the turnaround that we were predicting in the last edition of the Newsletter in December 2022? Or could the higher interest rates and recent bank failures in the United States and Europe be the first signs of a challenging 2023?



Impacts on TCO

In the last edition of this Newsletter, we analysed developments in the average Total Cost of Ownership (TCO) of a vehicle fleet, whose components were highly impacted by the challenges that we face from the persistent macroeconomic framework described above. We highlighted the overall rise in vehicle catalog prices (coupled with the major reductions in commercial discount practices among car makers), together with how changes in the price of fuels and energy have impacted TCO throughout 2022.

In this section, we will look at two other components of TCO that have been highly affected by the current environment: specifically, we will see the extent to which interest rates and operating costs are inflating the item of "fleet costs".

First, however, let us see what has happened to LeasePlan's TCO index from one year ago until now.



" from March of last year until now, the total cost of fleet ownership has increased by an average of 27%."

2.1. TCO Index: developments in the last half-year

While last October, we had already seen global increases on the order of 20%, where the most affected components were interest rates (+74%), energy (+27%) and taxes (23%) – the latter as a corollary of the remaining components – in March of this year, the TCO saw a new global increase of 7% compared to October 2022, where the most affected components continue to be interest rates (+12%) and amortization (+8%), given that taxes entail a consequence, since there have been no changes to tax policy. In other words, from March of last year until now, the total cost of fleet ownership has increased by an average of 27%.

Given this scenario, many fleet managers ask us questions such as the following: "Will these higher costs of ownership apply by the same token to all engine types?", or "Will some propulsion types be less affected than others?"

The answer is simple: all engine types have experienced price increases over the past 12 months. However, some engine types were indeed more affected than others. In the past six

months, the TCO of EV and PHEV was up "only" 5% and 9%, respectively. For combustion engine vehicles, the total cost of ownership was up on the order of 10% for petrol and 13% for diesel.

According to LeasePlan's TCO Index, from March 2022 to March of this year, the ownership costs of EV were up around 22%, primarily due to higher catalog prices, interest rates and operating costs (parts, tires, labour, etc.). The total ownership costs of diesel vehicles were more than 36% higher. In other words, 14 p.p. more than EV. In addition to being more expensive due to the components that helped to boost the cost of EV, diesel vehicles were also impacted by the higher costs of fuel, and above all by the component of taxes.

Indeed, more and more customers have been opting to update their grids of vehicles available to different hierarchical levels at their organizations. In addition to avoiding downgrades (as we will see below), they ultimately end up accelerating their journey of transition to electric mobility.





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2.2. Analysis of TCO components: interest rates and operating costs

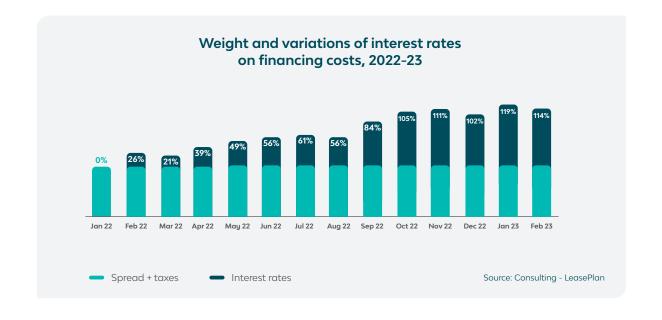
As we stated at the start of this section, let us now take a look at two components of the total cost of ownership which have also been directly affected by the market: interest rates, which directly affect leasing costs for the financing of new vehicles, and operating costs, which include items such as parts, tires and labour.

2.2.1. Changes in interest rates and increase in financing costs

In order to analyse interest rate increases, we began by looking at the various components comprising LeasePlan's financing costs. And, as occurs at financial institutions, beyond the spread and taxes, there exist interbank interest rates that dictate the cost of financing and, in the case of renting, the component of leasing costs. If we use January 2022 as a baseline, when key interest rates were slightly below 0%, we can see that the cost of financing is dictated only by taxes and by the spread. Starting in February of last year, interest rates began to rise, and financing costs were up 26% compared to the previous month. 12 months later, the escalation of key and interbank interest rates peaked in January of this year, when they

represented an additional financing cost of 119% compared to January of last year. These increases are due to the fact that we have gone, in less than 12 months, from negative key interest rates to the current rates of 3.5%, according to the adjustment done this month by the ECB.

In other words, despite the higher financing costs which have ultimately exacerbated vehicle rentals, one can see that the component of taxes and LeasePlan's spread have remained stable over this time period, and that the increase is largely due to key interest rate hikes, with no other increases to the remaining components representing LeasePlan's financing.





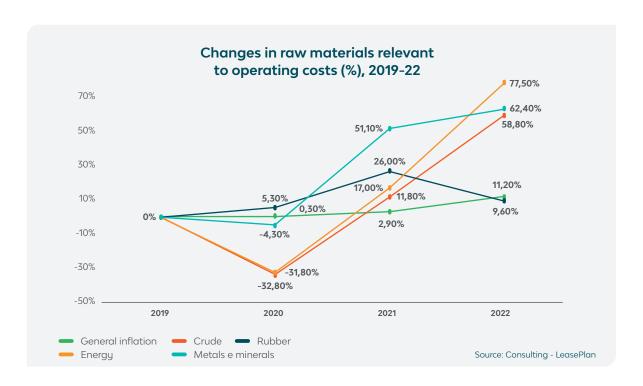
"Energy, metals, minerals and crude saw increases ranging from 60% to nearly 80%, if we use 2019 as a baseline."

2.2.2.

Inflation and higher operating costs

Another component of TCO which has been affected by the current market circumstances is operating costs, which include parts, tires and labour, among others. Inevitably, higher prices for the different underlying raw materials to produce the parts and lubricants needed for maintenance services, breakdowns and tire replacements, by effect of contagion, result in higher prices for the portion of operating costs affecting TCO.

If we compare trends in the inflation curve (in green, in the graph to the side) with the curve of energy prices (in yellow) and principal raw materials, we soon realize that only rubber – providing the basis for tire prices – was able to correct its trajectory in 2022 and follow the general price index, while still coming in 9.6% higher; energy, metals, minerals and crude saw increases ranging from 60% to nearly 80%, if we use 2019 as a baseline.



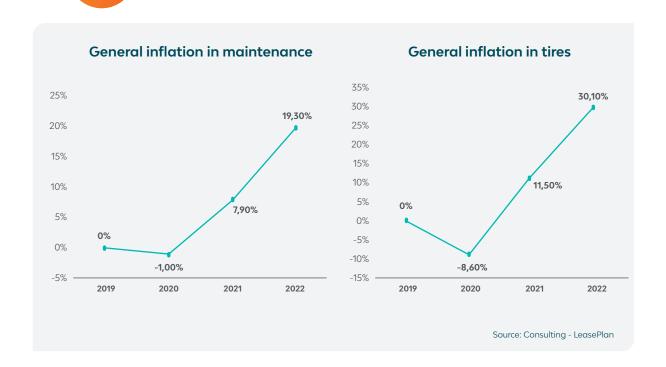
To what extent is LeasePlan passing these increases on to customer rentals?

In fact, as shown in the table on the left, Lease-Plan is not reflecting the higher prices of different components in its rentals. Parts, labour and lubricants saw average rises of 61%, 24% and 15%, respectively, from 2019 to 2022. Generally speaking, these increases translate into around 19.3% in increases to the basket comprising the prices of annual vehicle maintenance. Even so,

the price adjustment to the maintenance component of LeasePlan's rentals was well below two digits in growth. In the case of tires, prices were up around 30%, but LeasePlan's rentals were only updated by amounts falling far short of this number, thereby keeping a major part of these price increases from being passed on to its customers.



"The automobile sector has never experienced such long delivery times as it is today. Furthermore, the first months of the year are showing no signs of returning to normal."



3

Did you know...?

The shortage of vehicles on the market continues to challenge us. For this reason, we suggest going back to three topics:

- 1. The long delivery times for vehicles, now analysed by engine type,
- **ii.** The impact that this shortage is having on our rent-a-car partners, so essential to the service of replacement vehicles, and
- **iii.** The resulting price increase of this shortage, which is requiring many companies to consider downgrades in their vehicle grids.

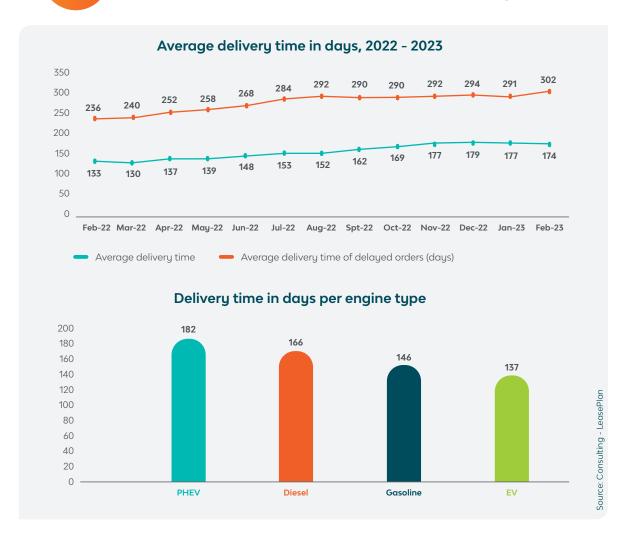
3.1.

Did you know that the delivery times for electric vehicles are shorter compared to combustion engine vehicles?

Long delivery times are a challenge we have already addressed in our first edition. As we have seen, the automobile sector has never experienced such long delivery times as it is today. Furthermore, the first months of the year are showing no signs of returning to normal. The average delivery time given by car makers at the time of ordering even decreased slightly in February of this year. However, if we consider the revised time over the entire waiting period, February was actually worse compared to December 2022. In other words, in February, the average of delayed deliveries was at 10 months.



"In the last two years, fleet managers have been confronted with extreme vehicle price increases, to the point of having to exclude many renewals in segments normally considered for the different hierarchical levels at their organizations."



While in our last edition, we helped decision-makers in their fleet renewal choices, revealing which car makers were faster and slower in terms of delivery, today we will show the same in terms of engine types, taking into account the **number of days**.

Looking at last year in terms of LeasePlan deliveries, the fastest engine types in terms of delivery were electric vehicles, while the slowest were PHEV and diesel vehicles. Electric vehicles came in at around four and one half months, while diesel vehicles came in at around six months.

3.2.

Did you know that transitioning to an EV can be a chance to avoid a vehicle downgrade?

According to LeasePlan's 2022 Car Policy Benchmark published in September of last year, around 47% of companies use rental ceilings as a means of selecting vehicles. In the last two years, fleet managers have been confronted with extreme vehicle price increases, to the point of having to exclude many renewals in segments normally considered for the different hierarchical levels at their organizations.

To illustrate this, we took a rental ceiling of €750 – frequently considered among larger companies – to find out which model we could fit into February of this year, so as to avoid even the slightest perception of a downgrade among drivers. As we can see, with the same ceiling of €750, it was possible to choose a BMW i4 in February 2022, while 12 months later, it was only possible to acquire a VW iD5.

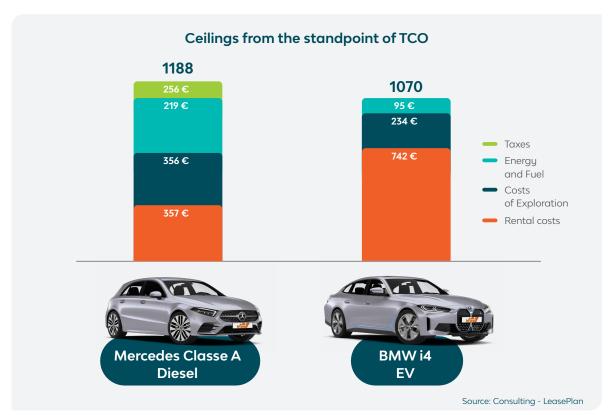


"Wouldn't it be more advantageous to consider ceilings from the standpoint of TCO, in lieu of the current standpoint of rental? No doubt yes."

Given this comparison, and from the potential standpoint of having to manage expectations and retain talent, a question arises that must be asked by each and every fleet manager: "Wouldn't it be more advantageous to consider ceilings from the standpoint of TCO, in lieu of the current standpoint of rental?»

A number of LeasePlan's customers now offer higher ceilings if their employees choose electric vehicles, since they are aware that this is more advantageous for their fleets from the standpoint of to-





tal cost of ownership, as it represents savings in energy and taxes, contributes towards employee satisfaction and accelerates the sustainability agenda of the two organizations.

Let's look at a practical example of a driver with a typical profile of 25,000 kilometres per year: with the current rental ceiling of a diesel model Mercedes Class A and a BMW i4, it is clearly more advantageous to choose the combustion engine vehicle (€712 rental for the Mercedes, compared to €975 for the BMW, if we add leasing and operating costs). However, we are overlooking costs for energy and autonomous taxation. With the addition of these two key components, we go back to the question raised above: will it be more or less advantageous to consider this from the standpoint of TCO in lieu of the standpoint of rental ceiling? Without a doubt, yes, as illustrated in the above graph.



"Para contornar a atual escassez, muitas locadoras ajustaram-se propondo soluções de mobilidade alternativas e mais flexíveis."

Did you know that the market already has some suggestions for addressing the problem of the lack of replacement vehicles?

Disruptions in the current market environment have been unending, while in the automobile market, the lack of vehicles is affecting most economic agents: i.e. in addition to impacting the business of our customers, who hire vehicles to serve their mobility purposes, another key agent which has been strongly affected are the rent-a-car companies, who not only lack vehicles to serve their customers in the tourism sector, but who are also unable to serve leasing companies looking for replacement vehicles to address situations of customer immobility.

To work around the current shortage, many leasing companies have adapted by proposing alternative, more flexible mobility solutions for their customers, namely through the TVDE (ride-hailing) voucher service. Under this method, the customer uses the services of TVDE

platforms to ensure mobility during vehicle downtime for annual maintenance services. A number of customers now prefer to use a TVDE voucher that allows them to go from the workshop to their job and, the end of the day, from their job back to the workshop to pick up their vehicle after its check-up.

Another trend we have seen in the market is combining the replacement vehicle offer in segments, as an alternative to the categories offered. This trend can be explained by the increasingly lower availability of diesel vehicles in some segments. In other words, customers no longer subscribe to a specific category that limits them to one type of engine within a segment, and now rely on a single segment with a wide availability of engine options.







Main recommendations:

We reiterate LeasePlan's recommendations in the above paragraph, which remain up-to-date vis-à-vis the adverse economic climate that continues to affect the automobile market.

As a consequence of what has been set out above, typifying the conditions under which we are currently living, issues such as detailed market analysis and greater flexibility to help and facilitate the life of company decision-makers have to be considered.

Intending to respond to existing constraints and doubts, LeasePlan recommends:





Extension of renting contracts;



Assessing whether to opt for electric vehicles, as they offer lower total usage costs;





Anticipating orders and updating policies fleet via:

- **1.** Extension of the term of contracts;
- 2. Plafonds revision;
- **3.** Redefining brands, models and equipment that are predefined in each organization;
- **4.** Use of short-term contracts Flexiplan and Used Car Renting to meet short-term needs.





We recommend anticipating, as far as possible, maintenance and overhaul times, as well as flexibility in accepting the replacement vehicle category in the event of maintenance or breakdown, taking into account the poor availability of Diesel vehicles in rent-a-cars.

Whichever option you consider, your LeasePlan Account Manager will, as usual, be fully available to assess and advise on each opportunity.

Do not hesitate to contact us.