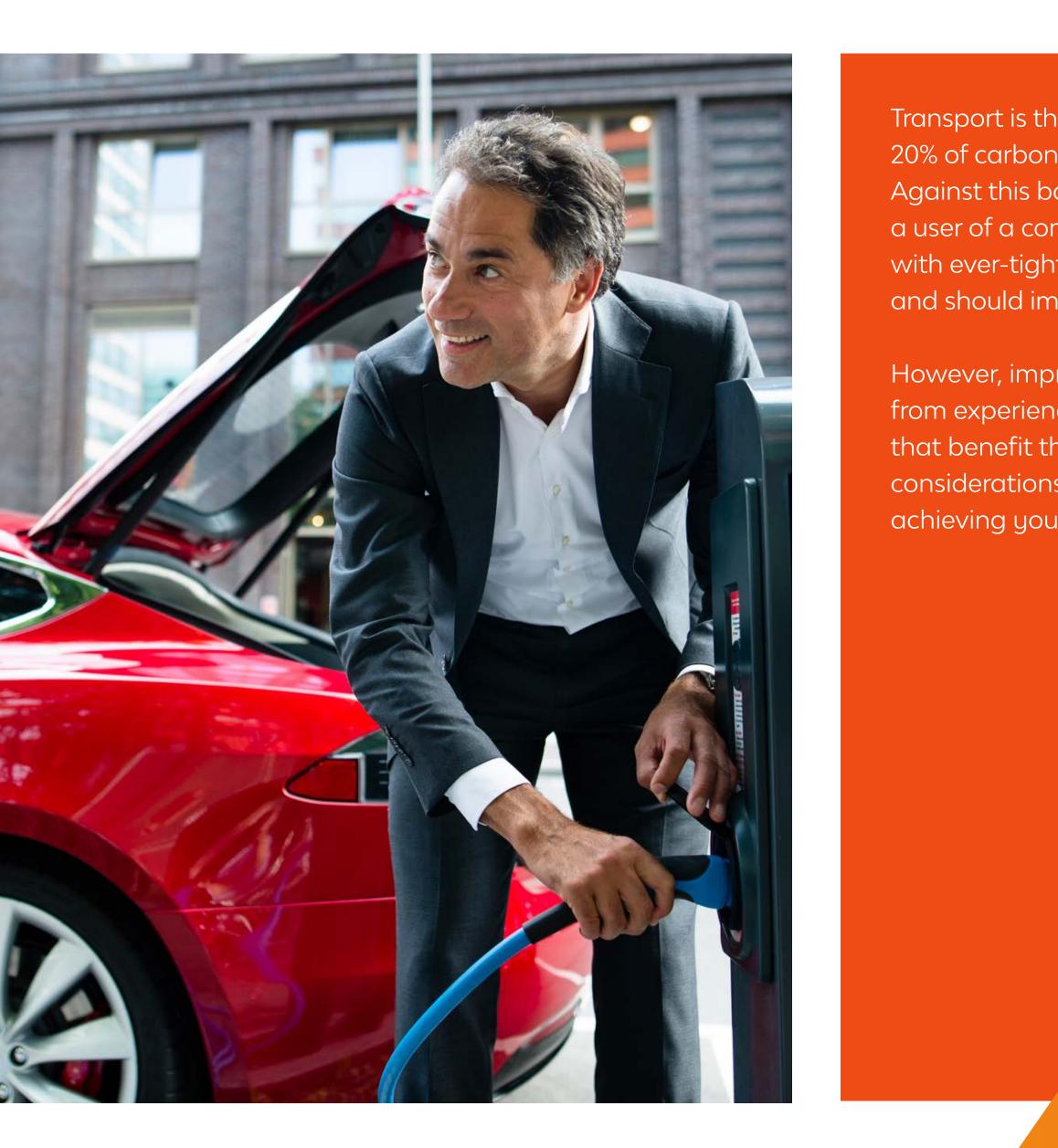
LeasePlan

Sustainable fleet management: how your fleet can contribute to the Net Zero Emission target

What's next?

Q4 2017





Transport is the fastest-growing contributor to climate change. Road transport accounts for approximately 20% of carbon dioxide emissions in the EUⁱ and about a third of greenhouse gas emissions in the USA. Against this backdrop, sustainable fleet solutions are increasingly gaining in importance since, on average, a user of a company vehicle generates up to three times more emissions than a private road user. Today, with ever-tighter new emission regulations coming into force, we see a variety of rapid changes that could and should impact your approach to fleet management with regards to sustainability.

However, improving your sustainability is not simply a matter of leasing new electric vehicles; we know from experience that it is about enabling a step-by-step transformation with end-to-end solutions that benefit the drivers and your bottom line alike. By providing an overview of the opportunities and considerations, this white paper will help you to adapt your fleet strategy and policy to contribute to achieving your company's emission targets.





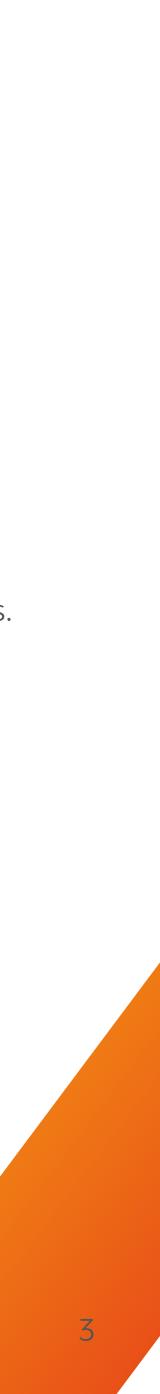
What is meant by 'net zero emissions'?

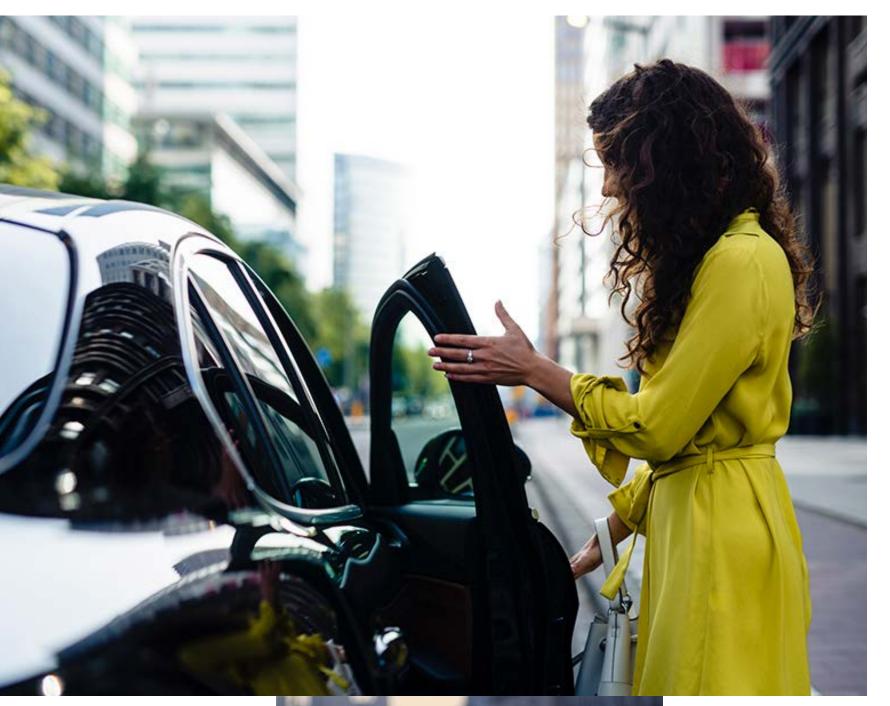
Carbon neutrality, or having a net zero carbon footprint, refers to achieving net zero carbon emissions by balancing a measured amount of carbon released with an equivalent amount sequestered or offset, or buying enough carbon credits to make up the difference. The term is used in the context of carbon dioxide-releasing processes associated with transportation, energy production and industrial processesⁱⁱ.

In fleet management, most companies initially seek to reduce their vehicle emissions through measures related to the choice of vehicle and fuel as well as the usage of the fleet. 'Green pioneers' also offset their fleet's emissions or buy carbon credits to achieve net zero emissions.

Today, the carbon neutrality concept is often extended to include other greenhouse gases. The term 'climate neutral' reflects the broader inclusiveness of other greenhouse gases contributing to climate change, with CO_2 being the most abundant.









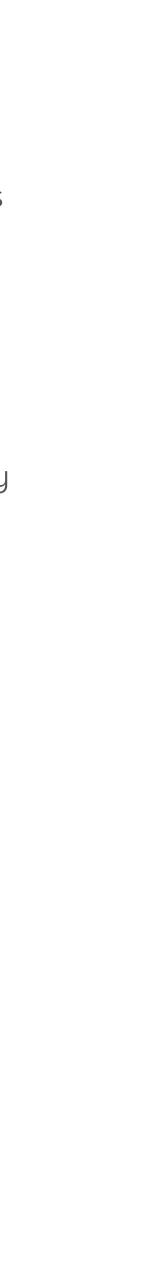
The effects of legislation

European Union (EU) legislation sets mandatory emission reduction targets for new cars. This legislation is the cornerstone of the EU's strategy to improve the fuel economy of cars sold on the European market. By 2021, on average, all new cars must achieve 95 grams of CO_2 per kilometre^{iv}, and similar targets have been set for new light commercial vehicles (LCVs). In the USA, all new cars must achieve the fleet average of 101 grams of CO_2 per kilometre (54.5 MPG) by 2025^v.

In EU member states it is very common for a fiscal system to be in place supporting the EU legislation. Zero-emission vehicles and ultra-low-emission vehicles (ULEVs) are typically incentivised, while the more polluting vehicles are penalised.

Since the Paris Agreement, local governments in Europe have increasingly started to look into vehicle emissions that directly influence air quality and the quality of life in cities. Hence they are also striving to reduce greenhouse gas emissions by, amongst other things, restricting access for certain vehicles. The diesel vehicle is the main point of discussion. From a fleet perspective, since corporate fleets are typically composed of modern vehicles complying with the latest emission standards, there is currently only a small risk of fleet vehicles being denied access to European city centres.

Nevertheless, more and more fleet-operating companies are becoming conscious of the polluting effect their fleet could be having on the planet. Many already have a strategy in place to significantly reduce their CO_2 emissions, and some even have a net zero emission policy aimed at reducing all their greenhouse gas emissions. Another example is the recently started global initiative bringing large corporates together to help drive the transition to electric mobility: the EV100.





A company's vehicle fleet relates to many areas of the organisation: the business, HR, Finance, Health, Safety & Environment (HSE) and so on. Therefore fleet management and, more specifically, reducing the fleet's environmental impact - needs to be embedded in the corporate strategy. To grasp the strategic importance of reducing your fleet's emissions, it is important to first understand the relative significance of those emissions within the company's entire environmental footprint. In a service company, for example, the fleet accounts for a relatively high share of the carbon footprint; this share is lower in a manufacturing company. Although reducing a company's environmental footprint often ultimately generates a cost reduction, reducing emissions generally requires upfront investments in terms of both time and money, as new or alternative technologies and methodologies frequently need to be explored and/or applied.

The external environment is an important factor in the ability to reduce vehicle emissions. In some markets, relevant offering of sustainable products, infrastructure and services do exist and there is an early majority using these solutions to drive down their company's footprint. However, in other markets sustainable products and services like electric vehicles or car-sharing initiatives are still in a premature stage of development. These countries are often characterised by a lack of electric vehicle charging infrastructure and nonsupportive legislation.

The position of your country on the environmental ladder strongly influences your abilities as a company to reduce your emission footprint and to create your ideal net zero emission strategy. Companies in developing markets could start by taking a stronger environmental stance and advocating the need for sustainable products, infrastructure and services. Typically, they will need to explore classic solutions to reduce their footprint, such as by selecting the right vehicle (combustion engines with lower CO₂ emissions), influencing driver behaviour, journey planning and load control, to name but a few.

Working together to achieve what's next in sustainable fleet management



Innovative ideas require you to go deep. Breakthings down into small steps.

An important element in the challenge to reduce vehicle emissions is the actual management of the ideas and measures implemented. Reducing emissions often means sacrificing other things, and therefore senior sponsorship and leading by example are classic key success factors. Involving the expertise of stakeholders such as your HSE manager will boost the progress of your fleet initiatives, as will joining forces with or utilising other company-wide initiatives. Needless to say, it is important to report back on and regularly communicate relevant KPIs and goals.

Going green isn't a quick win, but there is a lot to gain. As so many stakeholders are involved and the ideas are probably new to your organisation, you will need to 'go deep'. We recommend you break your plan down into small steps and prioritise those areas in which you have control and building from there (see Figure 1 on the next page).





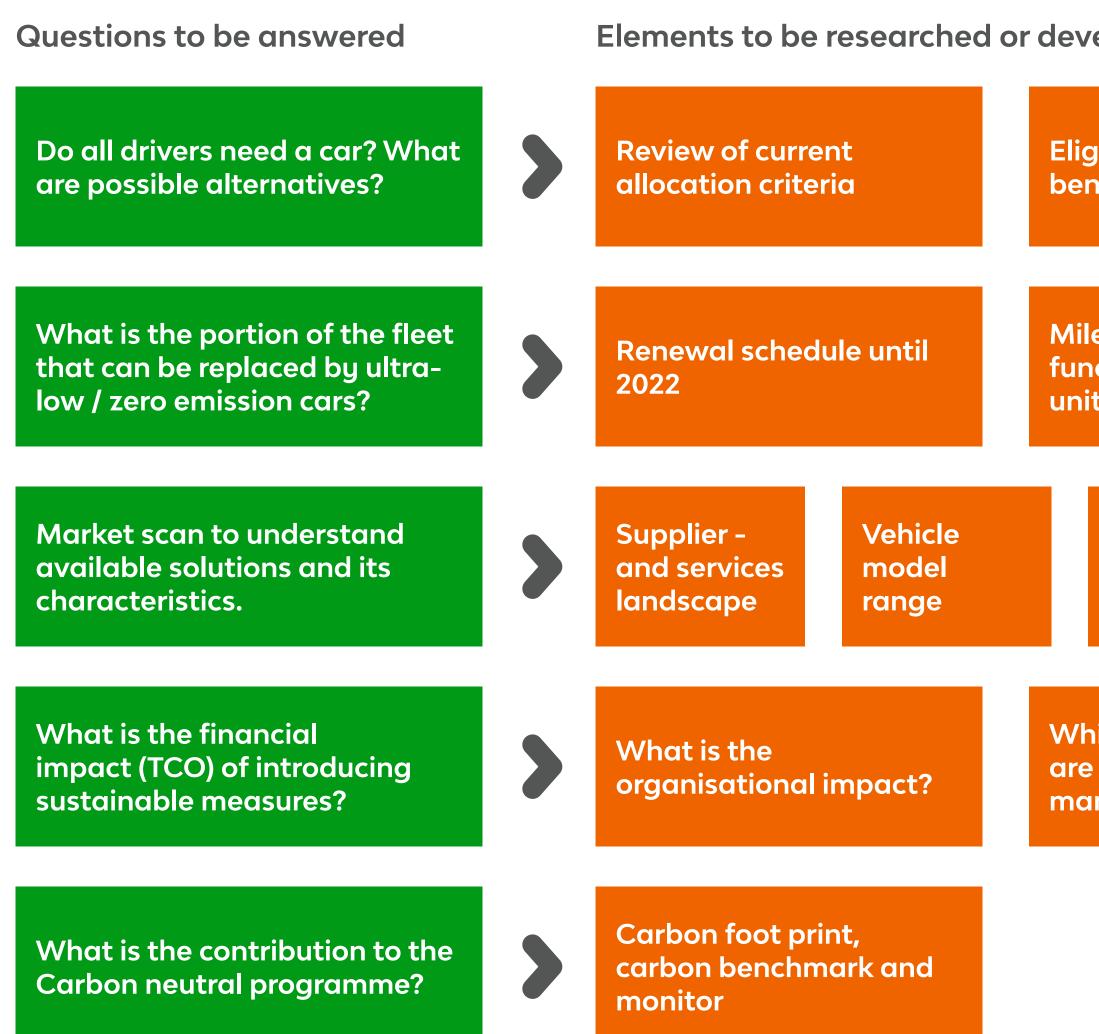


Figure 1, Example of a step-by-step approach

developed locally						
Eligibility/allocation benchmark			Carbon foot print, carbon benchmark and reporting lay-out			
Mileage patterns by function / area / business unit / individual						
	Local infra- structure	Alterna mobility		Driver training		Car sharing

Journey planning - journey alternative

Which decision points are required from senior management?

What kind of governance is required?

How to implement? (when, what, who, how)



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Measures to reduce CO₂



Sustainable fleet management: a wide choice of measures

Eligibility and car allocation

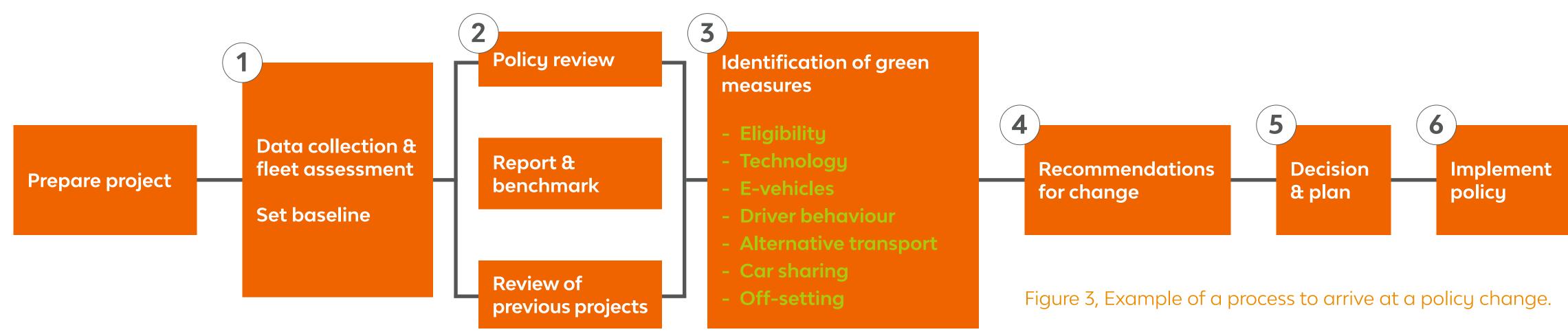
There is a wide choice of sustainable fleet management measures that can have a real impact. Our experience shows that, in an ideal scenario, CO₂ emissions can be reduced by as much as 40% over the course of four years. The remainder of your footprint would then need to be offset (see Figure 2). We take a closer look at some of the most commonly considered and implemented green measures below.

As a first step you may want to reassess your criteria for allocating company cars and to amend your lease policy accordingly – e.g. to ensure that a vehicle is allocated only to those employees who truly need one for business purposes. Employees who make only incidental business use of a vehicle could be offered a pool car or encouraged to use public transport instead.

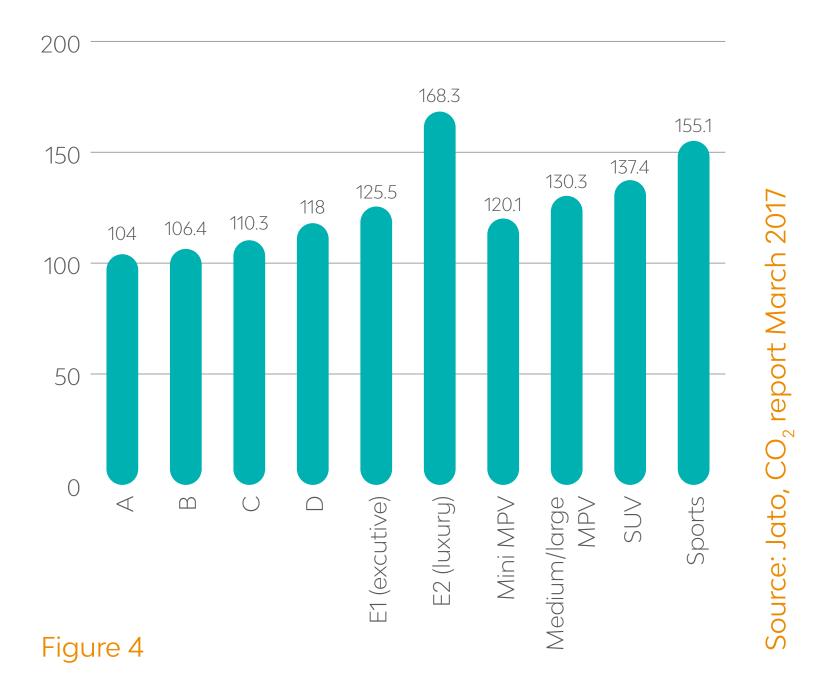
The different types of eligibility determine the ratio of your 'benefit vehicles' to your 'tool vehicles'. The higher your share of tool vehicles is, the better your company can steer the environmental impact of your fleet. In case of a higher share of benefit vehicles, you should pursue a strategy of influencing and incentivising those employees eligible for a company car to display good behaviour – such as by making the right vehicle choice and demonstrating an eco-friendly driving style – in order to reduce emissions.

Some industries are known for seasonal work or the need to have specialists on board for a limited period of time. Rather than allocating a company car based on a classic lease contract, the flex lease solution would make more sense in such situations. In this case, a vehicle can be leased for as briefly as one month.





Europe - AVG CO₂ 2016 (g/km) by vehicle segment



- Thresholds levels/roles.

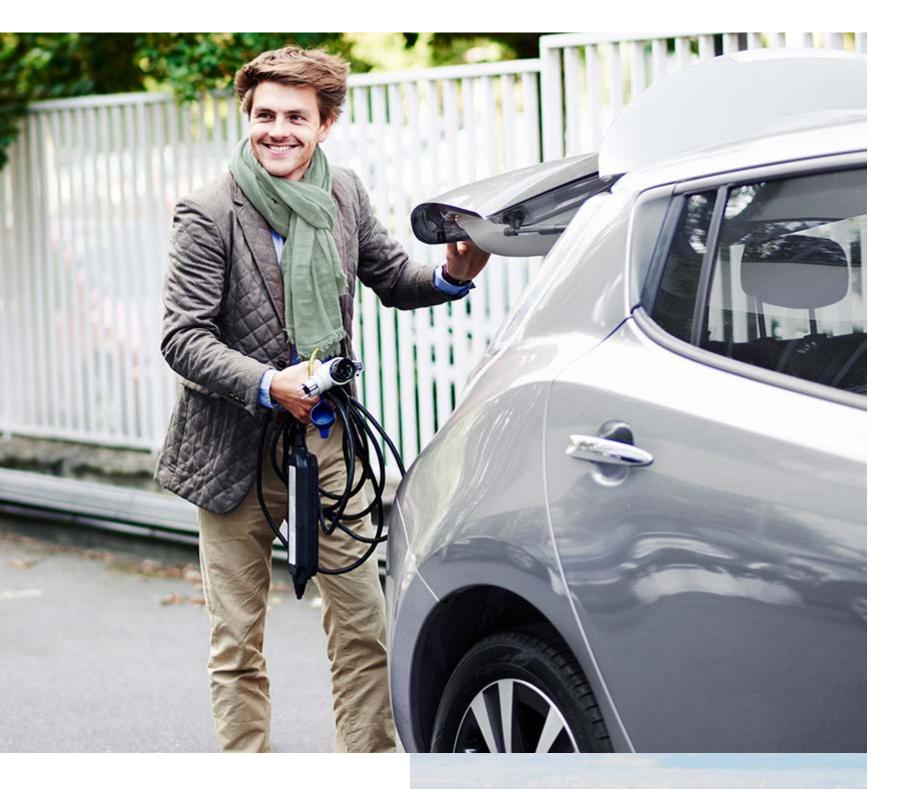
Your company car policy puts your fleet strategy into practice. Hence, any steps you intend to take to reduce your environmental footprint will also require the company car policy to be amended (see Figure 3).

One of the most commonly applied measures is to include in your car policy CO₂ thresholds that are aligned with manufacturers' targets and your country's fiscal situation. This means that a driver may only choose a vehicle up to a certain maximum CO_2 threshold, e.g. 110 g/km. This will automatically ensure that the vehicle choice supports your company's emission targets. Please note that CO_2 figures differ per vehicle segment (see Figure 4). Furthermore, you might want to set different CO₂ thresholds for different

Implementing such a threshold approach ensures that you automatically keep pace with the latest technological developments related to CO_2 emissions.



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The right car for the job

Especially when the car is a business tool, it is essential that it is 'fit for purpose'. This means it must be the right vehicle for the job, not only in terms of functionality and performance but also at the right cost and with the right environmental footprint. Today there is a wide choice of models to suit all size, weight, torque and payload requirements whilst also offering efficient fuel consumption and an attractive cost base.

Fuel card

In addition to assessing the vehicle's CO₂ emissions, you could introduce a fuel card as part of your driver service package. This will not only achieve cost benefits (since a fuel card often comes with discounts) and reduce the administrative workload involved in handling expenses, but it will also enable you to monitor and communicate actual fuel consumption, electricity consumption for EV's, mileage as well as total CO₂ emissions on an individual vehicle basis.

Technological developments & fuel types

Fuel types have a significant impact on the emission level, so it makes sense to offer vehicles that run on alternative fuels. Allow employees to opt for hybrid vehicles or full electric vehicles, for example, with zero carbon emissions or to choose a vehicle that runs on carbon natural gas (CNG); this lowers CO₂ emissions by 20% compared to a petrol engine and 15% compared to a diesel engine. Biogas (which has the same composition as CNG but is produced through the fermentation of biomass) achieves even better results. While LPG is a cleaner fuel, it has fallen out of favour because – among other reasons – most OEM warranties no longer support it. Last but not least, hydrogen also produces zero carbon emissions. However, this is not yet a feasible option for business purposes for reasons of expense and lack of refuelling stations.



Avoid carrying unnecessary or nonaerodynamic loads

Fuel consumption can increase by 4.7% per extra 100kg



Driver behaviour

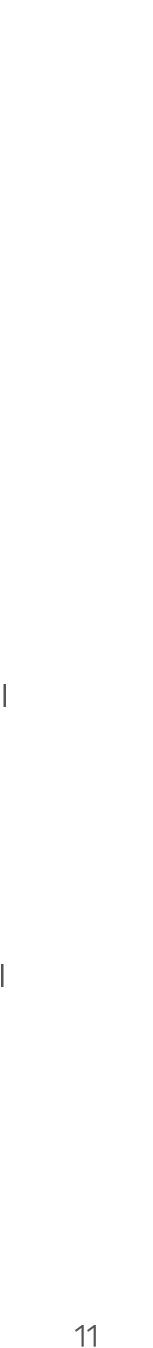
Another important aspect is the behaviour of the drivers themselves; their actions in terms of driving style, vehicle load, tyre pressure and journey planning are all important elements that can affect emission levels. Changing people's behaviour starts with building awareness and making them conscious of the ultimate impact – in terms of both pollution and financial costs – of their decisions. Other effective methods include making them responsible for their actions and rewarding good behaviour. Last but not least, driver training not only enhances safety but also reduces fuel consumption and hence CO_2 emissions.

Alternative transport

Especially in urban areas and in fleets with many benefit vehicles, companies are increasingly exploring public transport opportunities. Since the train, metro or bus will not always get you to your final destination, some companies have started providing shuttle buses to solve those first- and last-mile challenges. A number of pioneers in environmental strategies have even completely relocated their offices to an area that is within walking distance of a public transport hub.

Car sharing

A variation on alternative transport is car sharing. In general we are steadily moving towards a sharing economy, and car sharing is one manifestation of that. It is predominantly popular in urban areas and within the private sector for now, but as digital services are rapidly developing and people are becoming more and more 'connected' online, the car-sharing concept is becoming increasingly interesting for corporate fleets too. Standardising your fleet makes car sharing more feasible; if your fleet is made up of just a few different vehicle types, you could potentially use the vehicles for other purposes during working hours rather than just leaving them parked on the premises.







Offsetting

Even after you have implemented a range of environmental measures, your fleet will still produce some vehicle emissions. And if your fleet is crucial for business continuity either because your vehicles are a business tool and/or because you need to offer reward vehicles in order to attract and retain talented employees – what can you do if your organisation has a net zero emission target?

In this case, the remaining vehicle emissions can be 'offset'. A carbon offset is a reduction in the emission of carbon dioxide or greenhouse gases made in order to compensate for an emission made elsewhere^{vi}. Offsets typically take the shape of financial support for projects that reduce the emission of greenhouse gases in the short or longer term. The most common format is a renewable energy project, such as wind farms, biomass energy or hydroelectric dams. Others include energy-efficiency projects, forestry projects, the destruction of industrial pollutants or agricultural by-products, and the destruction of landfill methane. Two of the most popular types of carbon offset projects from a corporate perspective are energy-efficiency and wind turbine projects.





Sustainable fleet management; the next topic on your agenda

By reducing the vehicle emissions of your fleet, you will be helping to preserve our planet in both the short term and the long term. Your company's strategic awareness of that fact is no doubt expressed in ambitious objectives such as a net zero emission target. As the responsible for fleet, you are expected to take your share of responsibility for achieving these targets. In summary, there are three key measures that will significantly contribute to reducing your fleet's footprint:

- https://ec.europa.eu/clima/policies/transport/vehicles_en
- https://en.wikipedia.org/wiki/Carbon_neutrality
- www.epa.illinois.gov/topics/air-quality/mobile-sources/vehicle-emissions.../index
- https://ec.europa.eu/clima/policies/transport/vehicles/cars_en
- http://www.epa.gov/otaq/climate/documents/420f12051.pdf
- vi https://en.wikipedia.org/wiki/Carbon_offset

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- Define clearer/stricter car allocation criteria

- Offer a vehicle selection that is as 'green' as possible while also being fit for purpose - Encourage emission-conscious driver behaviour and optimised fuel consumption



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