



LEASEUROPE

Vehicle Leasing and Rental Companies' Contribution towards Emission Reductions

Combating climate change is currently at the forefront of global efforts. As cars emit 12% of the total CO₂ (the main greenhouse gas) emitted in the EU,¹ decreasing emissions from cars is an important part of the agenda on tackling climate change.

The purpose of this document is to explain that leasing and rental companies' vehicle fleets pollute less than the average fleet on European roads, both in terms of CO₂ and other pollutants, and what makes them optimally positioned to support environmental policies. Firstly, the paper outlines that due to the basic characteristics of leased and rental cars (recent models, engine choice, and regular maintenance), they produce fewer emissions. Secondly, the paper presents the services offered by leasing and rental companies which lead to even lower emissions. In particular, the aim of this section is to show that leasing and rental companies have the tools (and they use them!) to influence drivers' choice and/or behavior, thus resulting in lower pollution from cars. Various other aspects of the positive environmental contribution of leasing and rental companies are described in the final section.

1. Basic aspects of why leased and rental cars pollute less relative to other cars

a) Younger fleet

Leased and rental cars are on average much younger than the average car on European roads and consequently they emit less exhaust gas, such as CO₂, NO_x and particulate matter. The average length of a leasing contract (which is an approximation for the maximum age of a leased car) is 4 years². Rental cars are replaced even more frequently; normally every 6 months or after 10,000 kilometers. This is to compare with the average age of all cars which is 8 years in the EU-15 and up to 14 years in the new EU Member States³. Before they are put into circulation, all new cars must comply with

¹ Source: European Commission

² Source: Leaseurope statistics

³ Source: ACEA annual report

European emission standards. These emission standards regulate the emission of NO_x, HC, CO and particulate matter in the EU and are revised every 4-5 years in order to set stricter limits. Hence, a car produced in 2007 must comply with the Euro 4 emissions standards which are much stricter than Euro 1 standards valid for cars produced between 1992 and 1996 (for comparison of the development of the European emission standards see Table 1 in annex).

Furthermore, owing to continuous technological progress, new cars emit less CO₂ than old cars. Between 1995 and 2008, European car manufacturers will have introduced more than 50 new CO₂ efficient technologies (e.g. direct injection diesel engines, fast warm-up cooling system, 7-speed automated transmission, regulated electric fuel pump, etc.) and the development of newer technologies is rapid and ongoing.

In summary, leased and rental cars are young cars that are equipped with the latest CO₂-efficient technology and comply with the latest European emission standards; therefore they are much cleaner than non-leased older cars.

b) Better maintenance

Properly and regularly maintained cars are safer and emit less CO₂. Professional and regular maintenance is a common service offered to leased car users. For example a “full-service operating lease” includes costs of servicing and maintaining the vehicle as prescribed or recommended by the manufacturer, as well as the costs of repairs resulting from common wear and tear. A large share of leased cars in Europe are under operating leasing contracts⁴ and are thus likely to be well maintained vehicles, emitting lower levels of CO₂ than non-leased cars. Nevertheless, this maintenance effect is not limited to operating leasing, and finance leasing contracts may also include a service component.

In the case of rental cars, regular maintenance is a requirement, as every car has to be serviced before it is rented out to the next customer.

Two examples of how CO₂ emissions can be reduced through regular maintenance are tire pressure and oil checks. Incorrect tire pressure can result in a 3% increase in fuel consumption. Similarly, low levels of motoring oil deteriorate the functioning of the engine, which can consequently lead to higher fuel consumption and thus higher CO₂ emissions.

c) More diesel engines

A significant part of Europe’s latest progress on CO₂ reduction was actually achieved through the growing proportion of diesel engines, a move strongly supported by the leasing industry. Due to their fuel efficiency as well as some local specificities, for example in the taxation regime of diesel fuel, diesel cars are likely to have a higher residual value than non-diesels. Leasing companies may therefore offer a more competitive pricing for these vehicles, which at the same time emit less CO₂ than cars running on petrol. For example, in the Netherlands more than 50% of the business fleet consists of cars equipped with a diesel engine, while this is the case in only 12% of the

⁴ Leaseurope estimates that 30% of the cars on lease by its members are leased under operating leasing contracts, with the remainder shared between finance leasing and hire purchase contracts. Source: Leaseurope statistics

private fleet⁵. In the past, the environmental disadvantage of diesel engines was their higher emission of pollutants other than CO₂. Nevertheless, nowadays new cars are equipped with the latest technology in diesel particulate filters, with the consequence that diesel engines are cleaner than they have ever been before. As a result, pollution levels of new diesel cars are significantly lower than those of private cars that are older and not equipped with such technology.

2. Services of leasing and rental companies that lead to lower emissions from cars

In a time of rising awareness of climate change, businesses are displaying increasing interest in environmental issues. The pressure towards corporate social responsibility pushes firms to reverse their negative impact on the environment. For most companies, their vehicles would be the second highest source of CO₂, second only to emissions generated through the running of their premises. Therefore, adopting more eco-friendly fleets can lead to lower CO₂ emissions and thus better a business's environmental profile.

Leasing companies can provide their clients with a variety of products that serve as the necessary tools to achieve this goal:

- a) **Drafting a green company car policy:** Having a greener fleet is becoming an increasingly popular item on companies' environmental agendas. In fact, nowadays "green" is commonly an attribute of all company car policies offered. Leasing companies have the necessary information and resources to implement a more eco-friendly fleet, that takes into account the mobility and cost requirements of their corporate customers. They can draft green fleet policies perfectly tailored to a company's aspirations.
- b) **Selection of vehicles:** Leasing companies can provide environmentally conscious companies with unbiased information about greener cars and efficient fuel technologies for their fleets. Through the portfolio of vehicles that leasing companies have on offer, they can positively influence the clients' choice. Leasing companies tend to decrease the average CO₂ emissions of the fleet by offering a broader range of less-polluting cars. Hence, they indirectly influence the clients' choice towards less polluting cars. Similarly, car rental companies increasingly include more environmentally friendly cars in their fleet. For example, early in 2007 a car rental company introduced natural gas compact MPVs to its fleet at 19 locations in 15 cities across Germany. Similarly, another car rental company recently introduced 6 800 cars to its fleet in Europe (in Belgium, Netherlands, UK and Italy) that consume between 3,6 and 5,8 l/100 km.
- c) **TCO (total cost of ownership) approach as a tool towards lower emissions:** The TCO approach is widely used in leasing companies. It means that all costs related to a given car have to be taken into account in order to know the "real" cost of a certain car. Companies buying their cars instead of leasing them often do not know the total costs of their car park, and thus are not aware of the impact of car choice on their TCO. By adopting the TCO approach of the leasing

⁵ Source: VNA (the Dutch car leasing association)

companies, clients automatically tend to choose cars that have smaller engines (lower costs), that are fiscally more attractive (this is more and more defined by environmental taxation) thus also limiting the total emissions of their car park. As a result of the use of this approach, the average engine size of leased and rental cars has been dropping for years. Although the classical misconception that all company cars have big engines still prevails, in reality the majority of leased cars have smaller engines.

- d) Improved travel planning through technology:** As part of a green company car policy, leasing companies can provide their clients with software tools that optimize driving planning. Software that serves as an on-board eco-driving monitor can be installed on a driver's phone or PDA. In that way the driver has indications of optimum speed, taking into consideration meteorological conditions and the type of road being used, indicating the most suitable gear and the expected fuel consumption (and CO₂ emissions) for the planned journey. At the same time, the driver is informed about the topography and traffic conditions of the journey and receives assistance and alert messages based on his/her driving style.
- e) Eco-driving/professional driving training:** Leasing companies offer structured information to support targeted campaigns or training programs for drivers to learn how to drive more ecologically and at the same time more safely. This can be done for instance by means of publishing brochures or offering training courses. It is estimated that eco-driving leads to a reduction in fuel consumption of up to 25%.⁶
- f) Monitoring tools of progress towards greener fleets:** As leasing companies that manage fleets keep record of the fleet's mileage and consumption, they can easily measure real CO₂ emissions and thus substantiate the measures taken towards emission reductions. In this way, leasing companies can for instance compare CO₂ emissions before and after eco-driving training and thus have a clear idea about the benefits of such training.
- g) Schemes for offsetting companies' vehicle emissions:** For their clients, if interested, leasing companies are well positioned to put together the needs of a number of customers and arrange offsetting initiatives at competitive conditions, whether through tree planting or market based transactions, through which companies are able to offset the CO₂ that their fleet emits. Some leasing companies even apply such initiatives systematically. For example, one leasing company in the UK established a partnership with the National Forest Company, through which for every new car delivered to the customer a tree will be planted.

3. Other environmental aspects of leasing and rental companies

⁶ Source : ACEA

a) **Leasing and rental companies leading by example and testing new technologies for their clients:** Leasing and rental companies themselves are leading by example and include environmental measures in their own car policy. For example, leasing companies offer latest environmentally friendly vehicles to their staff in order to assess these vehicles' suitability for their clients. In this way, clients have greater trust in new green technologies that have already been tested by the leasing/rental companies offering them.

b) **Specific contribution of the rental car industry to the environment**

Rental cars combined with other means of transportation

In many cases, travelers use rented vehicles to do a part of their trip in combination with other more environmentally friendly modes of transport, such as rail transport. Hence, travelers can benefit from a more sustainable means of transport while guaranteeing the accessibility to their final destination, which is not always well connected. The alternative would be traveling the whole way by car, which would result in more pollution. The combined use of rented vehicles with other transport modalities is an example of good practice and a way of reducing the environmental impact of road transport, the number of kilometers traveled, the noise and the traffic congestion.

Renting big cars occasionally instead of driving them daily

Rental companies offer many makes and models, so that one can choose a car based on the need at the given time. An example of good environmental practice is owning a small car for short daily transfers (such as commuting to work in the city, shopping, etc.) and renting a bigger car when needed (for example for the annual family holiday).

Annex

Table 1

European emission standards for Passenger Cars (Category M₁*), g/km						
Tier	Date	CO	HC	HC+NO_x	NO_x	PM
Diesel						
Euro 1	July 1992	2.72 (3.16)	-	0.97 (1.13)	-	0.14 (0.18)
Euro 2, IDI	Jan. 1996	1.0	-	0.7	-	0.08
Euro 2, DI	Jan. 1996 ^a	1.0	-	0.9	-	0.10
Euro 3	Jan. 2000	0.64	-	0.56	0.50	0.05
Euro 4	Jan. 2005	0.50	-	0.30	0.25	0.025
Euro 5 (proposed)	Sept. 2009	0.50	-	0.23	0.18	0.005
Euro 6 (proposed)	Sept. 2014	0.50	-	0.17	0.08	0.005
Petrol						
Euro 1	July 1992	2.72 (3.16)	-	0.97 (1.13)	-	-
Euro 2	Jan. 1996	2.2	-	0.5	-	-
Euro 3	Jan. 2000	2.30	0.20	-	0.15	-
Euro 4	Jan. 2005	1.0	0.10	-	0.08	-
Euro 5 (proposed)	Sept. 2009	1.0	0.10	-	0.06	0.005 ^b
Euro 6 (proposed)	Sept. 2014	1.0	0.10	-	0.06	0.005
* Before Euro V passenger vehicles > 2500 kg were type approved as Light commercial vehicle N1 - I						

Source: European Commission