



Sustainable and green driving?

Ensure timely and correct maintenance! In any case, use the engine and transmission oils prescribed by the car manufacturer.

The environment is 'our future'. At MPM, quality and sustainability have been going hand in hand since we started. Mobility and the environment are often mentioned together nowadays. And the political agenda is also largely determined by environmental policy. The automotive industry has been working for decades on mobility with a constantly decreasing burden on the environment.

Is the mobility of the future a super efficient internal combustion engine, a hybrid, a full electric driveline or perhaps the fuel cell (hydrogen)?

The reality is that at least for the next 15 years the combustion engine is indispensable. These are diesel engines or petrol engines (mostly in passenger cars) in combination with an electric driveline (hybrid). But always very efficient and therefore economical. However, these only work properly with specialized engine and transmission oils.

This newsletter informs you about what you can do to benefit from sustainable and green driving.

Summary:

- Choosing the right engine and transmission oil also results in sustainable and green driving.
- Correct and on-time maintenance reduces fuel consumption, CO₂ and particulate matter (soot) emissions.
- Keeping the fuel injection system clean improves efficiency and therefore reduces emissions.
- Engines and exhaust gas after-treatment equipment have the lowest emissions at the correct operating temperature.

Tips for the workshop

- Use only the correct engine and transmission oil specified by the car manufacturer; quality and viscosity!
- Perform maintenance on time. Thickened engine oil gives a higher fuel consumption.
- Always perform complete maintenance, including the timely replacement of the air filter, for example.
- If the engine is heavily contaminated, an 'engine flush' is recommended (not for an engine with a 'wet' timing belt).
- Use fuel additives to keep the fuel system clean. At least add an additive to the fuel at every maintenance service. It is even better for the customer to purchase a number of bottles, so that the customer can regularly add this to the fuel themselves.
- Inform your customer that it's not good for the engine to not reach operating temperature (no higher than 60° C) when in use for short journeys only.
- Consider the driver and his / her driving behavior (for example many short journeys such as city traffic) and adjust the interval accordingly.

Sustainable and green driving

Increasingly stringent legislation is forcing car manufacturers worldwide to bring more environmentally friendly (hybrid) models with combustion engines to the market at an accelerated pace. European legislation sets standards for exhaust gas emissions and CO₂ emissions. Standards with which the new cars must comply. There are two laws in force in Europe that deal with exhaust gas emissions:

- 1 the EURO standards.
- 2 CO₂ legislation ('Paris climate agreement'): in 2021, the average (!) CO₂ emissions of all new cars that a manufacturer puts on the market may not exceed 95 grams of CO₂ / km.



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Moving things forward...

What is the EURO standard?

Exhaust gas emissions are specified in the EURO standards. This deals with limit values for the different types of exhaust gas emissions: CO (carbon monoxide), NOx (nitrogen oxides), HC (hydrocarbons) and PM (particles; with diesel and directly injected gasoline engines). The EURO 6 d- temp standard is currently in force. The EURO 6 standard is being introduced in phases. Continuing to comply with the limit values of the different types of exhaust gases, in reality requires timely and adequate maintenance of the cars above all. A task for the professional garage mechanics!

2018 Europe-23 Top 50 best-selling brands in order of average CO₂ emissions (in g/km; weighted by volume)

1	Tesla	0.0	0-90 g/km: 0.8% of total regs. (2017: 0.2%)
2	Smart	89.8	
3	Toyota	99.9	
4	Peugeot	107.7	90-110 g/km: 22%
5	Citroen	107.9	2017: 22%
6	Renault	109.1	
7	Nissan	110.6	
8	DS	114.2	
9	Suzuki	114.2	
10	Skoda	116.7	
11	Lancia	116.7	
12	Seat	116.9	
13	Volkswagen	118.8	
14	Fiat	119.2	
15	Mitsubishi	119.5	
16	Mini	119.9	110-130 g/km: 67%
17	Kia	120.4	2017: 73%
18	Dacia	120.8	
19	Lexus	122.5	
20	Hyundai	123.3	
21	Ford	123.7	
22	Opel/Vauxhall	125.6	
23	Honda	127.0	
24	Audi	127.6	
25	BMW	128.9	
26	Alfa Romeo	128.9	
27	Volvo	130.0	
28	MG	131.7	
29	Mazda	135.2	
30	Mercedes	139.6	130-130 g/km: 9%
31	Abarth	141.7	2017: 4%
32	Jeep	142.5	
33	Jaguar	142.8	
34	Infiniti	142.9	
35	Subaru	160.3	160+ g/km: 1.9%
36	Ssangyong	164.8	2017: 0.6%
37	Land Rover	166.7	
38	Porsche	183.0	
39	Lada	186.8	
40	Lotus	208.9	
41	Alpina	209.0	
42	Maserati	225.4	
43	McLaren	249.6	
44	Cadillac	255.8	
45	Chevrolet	255.8	
46	Aston Martin	261.8	
47	Bentley	273.2	
48	Ferrari	283.1	
49	Lamborghini	323.2	
50	Rolls-Royce	327.6	



What does the CO₂ emissions legislation mean?:

CO₂ (carbon dioxide) is released when burning fossil fuels. CO₂ is also released when generating electricity (for example for electric cars) from fossil fuels (such as coal and gas). There is a direct relationship between the burning of fossil fuel and the emission of CO₂. So saving fuel = CO₂ reduction. Below is an overview of the CO₂ emissions (state of affairs 2018); the average per brand for all models of these car manufacturers.

(source JATO 2018)

As a garage owner and car owner, how do you prevent unnecessary environmental pollution?

Unnecessary emissions are prevented by performing proper and timely maintenance on the technical systems of the car. For example, replace the air filter in time (for sufficient air supply and therefore optimum combustion) and the spark plugs (to avoid poor combustion, resulting in more harmful emissions). Another important factor is the use of the right engine and transmission oils for sustainable and green driving.

By using the quality of engine oil prescribed by the car manufacturer, the engine and the exhaust gas after-treatment system continue to function optimally and no fuel is wasted. Choosing the right engine oil viscosity also helps significantly. Oil that's too 'thick' results in more friction, which means higher fuel consumption.

Engine oil has tough task to fulfil in engines and it is therefore essential to change engine oil in time because the oil will thicken over time.

In addition, it is important to keep the fuel injection system clean. Contaminated injectors result in poor combustion and therefore in unnecessary harmful emissions.

The advice is to use fuel additives that keep the system clean, such as MPM Complete Diesel System treatment or the MPM Complete Petrol System Treatment.

But there are more ways to limit unnecessary emissions.

These include:

- Composed driving behavior
- Avoid unnecessary idling
- Keep the tires at the correct pressure
- Make sure the engine regularly reaches the normal operating temperature (at least 60° C). The engine and the exhaust gas after-treatment system work optimally when the engine is at operating temperature. So make sure that short journeys, during which the engine temperature does not exceed the minimum, are avoided as much as possible.

For technical questions:

Contact MPM Technical Support at support@mpmoil.nl or call +31 (0)15 - 251 40 30.



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