

9. část

Přečtěte si článek o dieslových motorech. Na základě četby vyberte k otázkám 50–64 vždy jednu správnou odpověď. Za každou správnou odpověď dostanete 1 bod.

ARE DIESEL CARS REALLY MORE POLLUTING THAN PETROL CARS?

Diesel cars (50) ..... subject to considerable negative publicity thanks to the amount of toxic emissions they produce. Some governments are planning to discourage their use or even ban them from urban areas altogether. Yet (51) ..... diesel car owners have reacted angrily, arguing they bought the vehicles because they were supposedly the environmentally friendly option. Diesel was promoted as a more environmentally friendly fuel as part of the EU's response to the 1997 Kyoto Protocol to reduce greenhouse gas emissions, especially carbon dioxide (CO<sub>2</sub>). Diesel engines are "lean-burn", meaning they use (52) ..... fuel and more air to get the same performance as a petrol engine.

So, while diesel fuel (53) ..... slightly more carbon (2.68kg CO<sub>2</sub>/litre) than petrol (2.31kg CO<sub>2</sub>/litre), overall CO<sub>2</sub> emissions of a diesel car tend to be lower. In use, on average, this equates to around 200g CO<sub>2</sub>/km for petrol and 120g CO<sub>2</sub>/km for diesel. But even when governments were promoting diesel cars, we knew there were issues with toxic emissions (those immediately harmful to humans, not CO<sub>2</sub>). Heating air in an engine produces nitrogen oxides (NO<sub>x</sub>) (54) ..... include the toxic nitrogen dioxide (NO<sub>2</sub>), greenhouse gas nitrous oxide (N<sub>2</sub>O) and nitric oxide (NO), which reacts with oxygen to form NO<sub>2</sub>. In a petrol car, these can be cleaned up by a three-way catalytic converter so that it emits (55) ..... average around 30% less NO<sub>x</sub> than a diesel car, without after-treatment.

We know that long-term exposure to nitric oxide can significantly (56) ..... the risk of respiratory problems, and so (57) ..... emissions have been regulated for some time. The fine particulate matter (PM) that diesel engines produce also causes cancer and can have acute respiratory effects. Particulate filters in car exhausts can reduce PM emissions by more than 90%, but they require good operating conditions and regular maintenance. They can also produce (58) ..... nitrogen dioxide, making diesel one of the main sources of this toxic gas.

For all the differences (59) ..... petrol and diesel cars in the past, current EU emissions standards for new vehicles of both types are quite similar. But there are still many older cars on the road that conform to earlier emissions standards. The problem is that governments often fail to grasp that focusing on one issue at a time, such as CO<sub>2</sub> output, inevitably (60) ..... them to ignore others, such as toxic emissions. It seems likely that to tackle both problems, governments (61) ..... start (62) ..... vehicles with internal combustion engines altogether, initially in urban areas and ultimately more generally.

For most cars (63) ..... over the past 20 years that may still be in use, petrol is likely to be less polluting overall (64) ..... diesel. Petrol cars also require less maintenance to keep them performing at that level. But new, well maintained diesel cars, built to the latest standards have similar emissions to new petrol vehicles.

(www.conversation.com, upraveno) [17]

- |    |                     |                    |                    |
|----|---------------------|--------------------|--------------------|
| 50 | A..... have become  | B..... has become  | C..... have became |
| 51 | A..... any          | B..... some        | C..... none        |
| 52 | A..... less         | B..... fewer       | C..... few         |
| 53 | A..... contain      | B..... contained   | C..... contains    |
| 54 | A..... which        | B..... who         | C..... where       |
| 55 | A..... in           | B..... on          | C..... at          |
| 56 | A..... increase     | B..... incubate    | C..... decrease    |
| 57 | A..... this         | B..... those       | C..... these       |
| 58 | A..... more         | B..... most        | C..... many        |
| 59 | A..... from         | B..... to          | C..... between     |
| 60 | A..... led          | B..... lead        | C..... leads       |
| 61 | A..... will have to | B..... will has to | C..... will have   |
| 62 | A..... ban          | B..... banning     | C..... to banning  |
| 63 | A..... build        | B..... built       | C..... builded     |
| 64 | A..... then         | B..... than        | C..... that        |