

The Consumer Voice in Europe

## WHAT DO LOCAL BANS OF DIESEL CARS IN CITIES MEAN FOR CONSUMER POLICY?

BEUC questions and recommendations



**Contact: Dimitri Vergne – [sustainability@beuc.eu](mailto:sustainability@beuc.eu)**

**BUREAU EUROPÉEN DES UNIONS DE CONSOMMATEURS AISBL | DER EUROPÄISCHE VERBRAUCHERVERBAND**  
Rue d'Arlon 80, B-1040 Brussels • Tel. +32 (0)2 743 15 90 • [www.twitter.com/beuc](http://www.twitter.com/beuc) • [consumers@beuc.eu](mailto:consumers@beuc.eu) • [www.beuc.eu](http://www.beuc.eu)  
EC register for interest representatives: identification number 9505781573-45



Co-funded by the European Union

Ref: BEUC-X-2018-078 - 17/09/2018

## Why it matters to consumers

For decades, diesel-powered cars have been popular among European motorists, largely because they were strongly incentivized by public authorities. As they impact air quality, citizens are concerned about the effect of diesel cars on their health. Local bans on certain diesels, and national phase-out plans, ask for a thorough review of the impact of diesels decline on consumers. For example, what happens to cars of which the resale value has suddenly plummeted?

## Summary

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Diesel bans are increasingly issued – or likely to be so – across European cities. To mitigate their effect on people’s daily lives, European consumer groups call on car manufacturers to take three actions:

- Immediately update the emissions control software on all Euro 5 and 6 diesel vehicles
- Upon consumer request, reequip potentially affected diesel cars with the latest exhaust treatment technology (so-called “hardware change”)
- Offer consumers a “conversion premium” by which the owner of a diesel vehicle can give it back in exchange for a cleaner car such as a zero or low-emission vehicle.

This is not sufficient to tackle the full implications of Diesel bans. Which is why car makers must own up to their responsibility. And why a longer-term plan must be forged to clean up and decarbonize road transport.

## 1. Introduction: the political context to diesel bans

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In February 2018, Germany's Federal Administrative Court issued a landmark ruling which allows cities facing severe air quality problems to introduce restrict access to diesel vehicles<sup>1</sup>. This ruling was probably the most striking development of a series of announcements made over the past few months across Europe about the doomed future for diesel vehicles in Europe.

At the local level, the city of Hamburg already prohibits the access of pre-Euro 6<sup>2</sup> diesel vehicles – meaning cars placed on the market before September 2014 – to certain streets of its city centre. Municipalities like Madrid, Paris or Rome have also announced their intention to progressively ban diesel vehicles between 2024 and 2030. Some EU countries – such as France, the Netherlands or the UK – aim to entirely end the sale of petrol and diesel vehicles between 2035 and 2040. At EU level, the European Commission has launched infringement procedures against 7 EU Member States for breaching EU air quality standards and failing to properly address the issue<sup>3</sup>. More recently, the EU Commissioner for industry Bieńkowska openly said that “*diesel is a technology of the past*” which would “*completely disappear*” in several years<sup>4</sup>.

It might well be true that diesel technology has entered a permanent decline amidst the never-ending emissions scandal rocking the industry<sup>5</sup>. We can hope that the recent overhaul of the EU car testing framework (reform of the type-approval regulation and introduction of new tests cycles WLTP and RDE) will contribute to solving the problem for new cars. Nevertheless, the fact remains that many Europeans rely today on the use of their diesel cars to commute to work, bring their kids to school, or do grocery shopping. These consumers bought their cars believing manufacturers' advertising that they were purchasing *clean* vehicles, which they could easily resell after a few years of use. It turns out these vehicles are far from clean, and their resale value is plummeting.

The introduction on short notice of diesel bans in European cities, starting with German ones, poses a number of significant problems. While exemptions are foreseen for the transport of goods and provision of services, consumers have to face the consequences of such regulatory measures and solutions to the following questions have to be found:

- What about consumers owning a vehicle potentially affected by a ban? How to ensure these bans do not impede their daily mobility needs? How to ensure that these consumers do not find themselves owning a vehicle worth nothing or if they do are properly compensated for the loss of value?
- What is the best way to avoid diesel vehicles, prohibited in western European cities, flooding central and eastern European markets through a cheap second-hand market?
- How do policy-makers intend to properly inform motorists about where they are allowed to drive, and where they are not?

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<sup>1</sup> <http://www.bverwg.de/pm/2018/9>

<sup>2</sup> European emission standards, known as Euro norms, define the acceptable limits for exhaust emissions of new vehicles sold in EU. They define the maximum emissions levels of nitrogen oxides (NO<sub>x</sub>), [total hydrocarbon](#) (THC), [non-methane hydrocarbons](#) (NMHC), [carbon monoxide](#) (CO) and [particulate matter](#) (PM) but they don't apply to CO<sub>2</sub> emissions which are handled in a different regulatory framework. The Euro norms evolve over time, new cars placed on the market as from September 2017 have to comply with the Euro 6d norm.

<sup>3</sup> [http://europa.eu/rapid/press-release\\_IP-18-3450\\_en.htm](http://europa.eu/rapid/press-release_IP-18-3450_en.htm)

<sup>4</sup> <https://www.bloomberg.com/news/articles/2018-05-27/diesel-cars-to-die-out-in-tesla-like-future-eu-regulator-says>

<sup>5</sup> <https://www.bloomberg.com/news/articles/2018-05-25/daimler-in-talks-with-german-authorities-over-diesel-issues>

Solving this problem is a complex task which will mean that authorities at local, regional, national and EU level will need to work together. Here are BEUC's recommendations to authorities to address these issues and prevent consumers from footing the bill for industry misbehaviour.

## **2. Fix the immediate threat: car manufacturers must proceed to a large-scale emissions fix for ALL affected European consumers**

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The problem of diesel cars over-emitting, and polluting the air quality in our cities, is European. The dieselgate scandal revealed that the vast majority of diesel cars present on our streets today do not comply with the 'Euro' emission standards in real-life. There are many reasons for this: cars makers have implemented technologies which reduce emissions in the laboratory but which do not allow for such reductions under most conditions in the real world, national authorities which oversee car testing have been far too lenient in their interpretation of type-approval requirements, there was also insufficient and ineffective enforcement at EU level. These shortcomings largely explain why cities are left with no other choice than to restrict access for diesel vehicles.

Until now, despite this cross-border nature of the problem, there has been virtually no common answer at European level to deal with the issue of an existing car fleet that over-emits and pollutes. Policy actions differ widely from Member State to Member State, even city to city.

In Germany for instance, following the pressure of diesel bans, a series of so-called 'diesel summits' were organised. These led to some (but not all) car manufacturers agreeing to update the emissions system software on their Euro 4 and 5 diesel vehicles, and to make commercial offers to clients wishing to exchange their diesel car for a newer model. Unrelated to the diesel summits, other car manufacturers agreed to also undertake software update campaigns on some of their diesel models<sup>6</sup>. In many EU countries however, no action was taken to fix the massive emissions problem of many diesel vehicles. In most cases, any action from car manufacturers have been voluntary with authorities not thoroughly checking whether the corrective actions have been done properly.

Many stakeholders also sincerely doubt that the announced actions will improve the situation. There is for instance a big discussion about the effectiveness of software updates. While the car industry estimates that it could reduce emissions by up to 25%<sup>7</sup>, others argue that only hardware retrofits (meaning reequipping existing cars with latest anti-pollution technology) – a solution all car manufacturers have categorically refused for the moment – could lead to significant emissions cuts. The result is that, a consumer living in country A who has bought the same Euro 5 diesel vehicle as another consumer living in country B will be offered completely different options – or perhaps no option at all. This despite both consumers having the exact same model, and comparable emission levels.

Diesel bans also have the potential to simply 'move' the problem from one part of Europe to another. Bans in Germany could lead diesel cars to become 'unsalable' in that country, plummeting their residual value. But this would not stop these cars from being sold at rock-bottom prices in second-hand markets without diesel bans, such as those in Central

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<sup>6</sup> <https://www.nbcnews.com/business/autos/renault-plans-software-upgrade-reduce-high-diesel-emissions-n499476>

<sup>7</sup> <http://europe.autonews.com/article/20170801/ANE/170809965/german-automakers-offer-software-update-to-cut-nox-emissions-by-25>

and Eastern Europe<sup>8</sup>. In these countries, the air quality health crisis could be worsened, and transition to clean mobility hindered or delayed for many years.

To address the above issues, BEUC is therefore calling on public authorities and car manufacturers to:

- **Immediately update the emissions control software on all Euro 5 and 6 diesel vehicles:** these updates need to effectively and considerably lower the emissions without negatively impacting the performance and fuel consumption of the cars. The type-approval of these software updates and of their eventual consequences on the functioning of the car (fuel consumption, potential deterioration of some parts etc) should be made public by national authorities. Potential negative effects need to be monitored by the public authorities through re-testing the cars. Any potential damage or additional repair needs to be fully covered by the car companies and be free for the consumer.
- **Retrofit the hardware where the situation requires and upon consumer request:** In the case of an imminent city ban, as well as a request by consumers, car manufacturers should undertake a hardware fix, at their own cost, and reequip Euro 5 and 6 vehicles with the latest anti-pollution technology. This operation should be done within a reasonable timeframe, not exceeding one month after the request has been made. If the car manufacturer cannot perform the operation within this timeframe, it should provide the affected consumer with an alternative transport option or compensate for the additional transport costs and inconvenience.
- **Conversion option:** car manufacturers should systematically offer to those consumers in possession of Euro 4, 5 or 6 vehicles that are potentially affected by a ban a 'conversion premium'. Which means that these consumers can switch to cleaner options, preferably zero-emission vehicles such as electric cars, but also low-emission vehicles such as plug-in electric cars (PHEVs) or best-performing internal combustion engines like hybrids (HEVs). The returned vehicles would not be sold on the second-hand market but scrapped to avoid flows of dirty diesel cars being exported to other parts of Europe or elsewhere. This conversion offer should exclude Euro 6 diesel vehicles which were type-approved before the entry into force of RDE regulation (pre-Euro 6d), the majority of these models also emit much more in reality than in the labs<sup>9</sup> and could be affected by diesel bans in the future<sup>10</sup>.
- Finally, car manufacturers should **stop selling pre-Euro 6d diesel vehicles, meaning most models built before 2018, unless they have been retrofitted.**

### 3. Maintain the pressure: let's not let the automotive industry off the hook

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Since the beginning of the emissions scandal, only the Volkswagen Group admitted to cheating official car tests by using defeat devices. Results from on-the-road tests conducted on cars of many more brands have by now shown that the problem goes far beyond VW. Pollutant (NOx) emissions from diesel cars of most car makers are on average

<sup>8</sup><https://www.transportenvironment.org/sites/te/files/publications/2nd%20hand%20diesels%20BG%20briefing%20final.pdf>

<sup>9</sup> <https://www.theicct.org/publications/real-world-emissions-using-remote-sensing-data>

<sup>10</sup> <https://www.euractiv.com/section/air-pollution/news/off-limit-new-diesel-cars-evade-european-city-bans/>

approximately 500% higher in real-life than in the laboratory<sup>11</sup>. The dieselgate scandal shed light on the so-called 'emissions control strategies; by which most car manufacturers programme their emissions control technology to turn itself down or sometimes even entirely switch off when a car is outside the lab test. Most of the time, manufacturers justified this on the vague ground of "*protecting the engine against damage or accident and for safe operation of the vehicle*". This without providing robust evidence that shows the need for such technologies or explaining they simply did not use alternative technologies. Consumers are therefore left in the dark and never explained about emissions control systems not working under run-of-the-mill conditions.

National type-approval authorities have been far too lenient with car manufacturers by approving these strategies without asking them for technical justifications that these strategies were really needed to protect the engine. The European Parliament's investigation committee on "emissions measurement in the automotive sector" explicitly stated that "*some emission control strategies applied by car manufacturers point towards the possible use of prohibited defeat devices*"<sup>12</sup>. These strategies include thermal windows able to detect when the vehicle is operated outside of laboratory tests, or timers which turn down depollution devices after a certain time. In the absence of any convincing justification, type-approval authorities were much too complacent with car makers by approving these so-called auxiliary emissions strategies which can in reality be qualified as defeat devices. The European Parliament concluded in the same report that these optimization strategies "*can be attributed to commercial choices made by the car manufacturer to achieve different objectives, such as reducing fuel consumption, increasing user convenience, reducing costs by using cheaper parts or addressing design constraints*" and that "*these objectives are not covered by the exemptions on the prohibition on the use of defeat devices*".

The result of this cosy relationship between car manufacturers and type-approval authorities is that the use of defeat devices, which was supposed to be a strictly regulated exemption, became the rule. Industry seems to get away with it without any problem.

A recent infringement procedure launched by the European Commission against Italy<sup>13</sup> for breaching EU rules on car type approval in the case of the type-approval of a Fiat vehicle could change the situation and set a precedent. BEUC's opinion is that most diesel vehicles potentially affected by bans are equipped with defeat devices, or some sort of emissions strategy that conceals the real-world polluting emissions of a car. Such cannot be justified and is therefore not compliant with EU law. It is therefore the manufacturers' responsibility to either fix the problem or compensate the owners of those vehicles.

#### Recommendation:

BEUC asks the European Commission and national type-approval authorities to conduct thorough examination of diesel cars potentially affected by bans:

- Can car manufacturers justify the use of the emissions control strategies on the basis of the [guidance](#) published by the European Commission last January and which makes a clear distinction between legal "auxiliary emissions strategies" and prohibited defeat devices?
- Did car makers constantly make use of the best available technology?

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<sup>11</sup> <https://www.transportenvironment.org/what-we-do/air-pollution/road-vehicles>

<sup>12</sup> <http://www.europarl.europa.eu/sides/getDoc.do?type=REPORT&mode=XML&reference=A8-2017-0049&language=EN#title6>

<sup>13</sup> [http://europa.eu/rapid/press-release\\_IP-17-1288\\_en.htm](http://europa.eu/rapid/press-release_IP-17-1288_en.htm)

**If the answers to the above questions are negative it is car manufacturers' responsibility to either fix the problem (through a software update or hardware retrofit if needed) or compensate the owner of these vehicles.**

#### **4. Longer-term: clean-up the fleet, improve consumer information.**

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The long-term solution to the massive emissions problems is the decarbonisation and thorough cleaning of Europe's car fleet. Battery-electric vehicles have no tailpipe emissions and are expected to become cheaper to own and to run than petrol and diesel in the mid-2020s<sup>14</sup>. Which is clearly a solution to the air quality crisis posed by road transport, and a low-carbon one at that.

For Europe to move to an era of environmentally-friendly transport, we need a mix of policy measures. These ought to tackle not just air pollutant (NO<sub>x</sub> and fine particles) emissions, but also take fuel consumption (CO<sub>2</sub>) into account. At the very least, the measures must include strict EU CO<sub>2</sub> targets for 2025 and 2030; a system that rewards or penalises car-makers, so they reach targets for placing zero and low-emission cars on the market; financial and non-financial incentives for consumers to take up these cars, and the roll-out of charging infrastructure. See also our [full position](#) on this<sup>15</sup>.

Policy-makers should also ensure consumers are properly informed about the emission levels of their cars through a reform of the Car Labelling Directive and about which restriction applies in cities they are crossing.

##### Recommendations:

- Set ambitious CO<sub>2</sub> reduction targets of 25% in 2025 and 45% at least in 2030 for new car sales.
- In its current proposal<sup>16</sup>, the European Commission only intends to reward car makers who meet targets for placing zero/low-carbon cars on the consumer market. This must be transformed into a 'two-way adjustment scheme' whereby manufacturers could be rewarded or penalised when they do not meet the targets.
- Reform the Car Labelling Directive: To ensure that EU consumers are given more reliable, comparable, relevant and easy-to-understand information about the emissions, fuel consumption and cost performance of cars.
- Adopt harmonised guidelines at EU level as to how to apply zero and low-emission zones in Europe to avoid a patchwork of different rules.

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<sup>14</sup> [http://www.beuc.eu/publications/beuc-x-2016-122\\_low\\_carbon\\_cars\\_in\\_the\\_2020s-brochure.pdf](http://www.beuc.eu/publications/beuc-x-2016-122_low_carbon_cars_in_the_2020s-brochure.pdf)

<sup>15</sup> [http://www.beuc.eu/publications/beuc-x-2018-001\\_dve\\_co2\\_position\\_paper.pdf](http://www.beuc.eu/publications/beuc-x-2018-001_dve_co2_position_paper.pdf)

<sup>16</sup> The time of writing is June 2018.



*This publication is part of an activity which has received funding under an operating grant from the European Union's Consumer Programme (2014-2020).*

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