

Dirty diesels heading East

New evidence on exports of 2nd hand dirty diesels in Bulgaria

April 2018

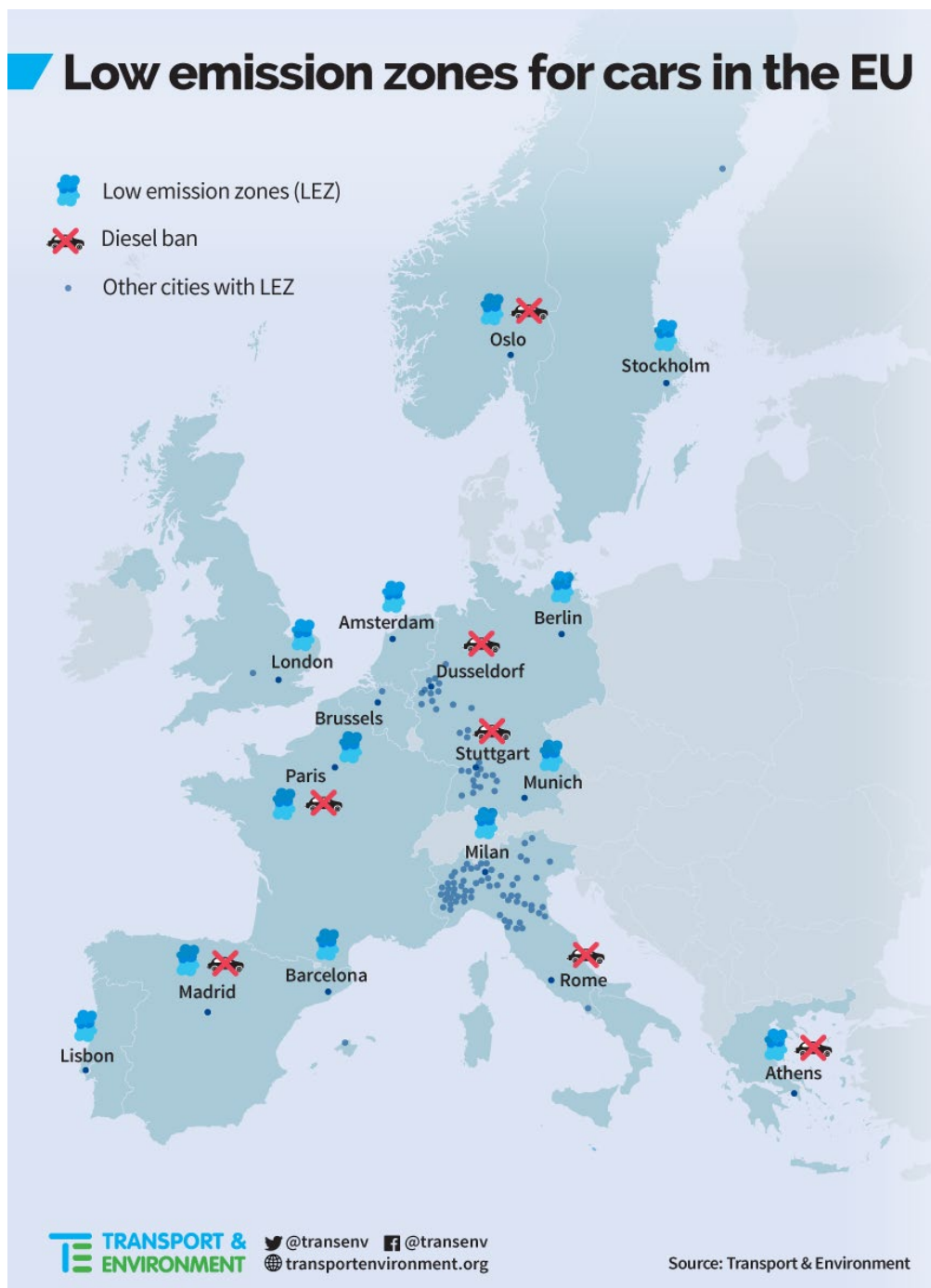
1. Diesel bans looming in western cities

Since Volkswagen was caught cheating on emissions in the US, the dieselgate scandal has spread globally embroiling most of European car manufacturers. Compromised national vehicle authorities tasked with policing emissions compliance refuse to demand fixes, and so the carmakers remain unpunished. As a result there are an estimated 37 million¹ dirty diesel cars and vans that continue to drive on EU roads. Cities suffer the consequences: the pollution caused by toxic diesel fumes causing thousands of premature deaths, and even greater damage to public health and wellbeing. Meanwhile EU Member States are failing to meet the EU air quality standards with the imminent threat of court action and penalties.

The pollution crisis caused by carmakers' manipulation of emission rules has left cities with no choice but to start banning diesel cars: Paris, Madrid, Oslo, Amsterdam, Athens and Rome are among those planning bans (see the infographic below). But with impending use-restrictions drivers are abandoning their diesel cars, and the resale values are falling. Many of these dirty diesels will end up in Central & Eastern European countries, exporting pollution from the West to the East. There are few effective measures to restrict the circulation of polluting vehicles in Central and Eastern Europe - the one measure planned in Prague for 2019 has been postponed - so the diesels can continue to pollute with impunity.

The flow of cheap, unfixed, second hand diesels will simply shift air pollution problem east rather than solving it, deepening the existing East-West divide on air quality. EU citizens everywhere deserve access to clean air; there should be no second-class.

¹ Transport & Environment, 2017, <https://www.transportenvironment.org/publications/diesel-true-dirty-story>



2. Over 30 thousand dirty diesels exported to Bulgaria in 2017

Bulgaria is a notable example, with some of the worst pollution in Europe causing over 13,000² premature deaths annually. The country is already infringed by the European Commission for failure to reach the 2010 emission limits for carcinogenic particles.

Bulgaria currently holds the Presidency of the EU and has declared tackling air pollution a priority for its term. On the 10th of April environment ministers from across Europe, including the Western Balkans, will gather in Sofia to debate measures to improve the quality of air that Europeans are breathing. Ahead of

² EEA, 2017, <https://www.eea.europa.eu/publications/air-quality-in-europe-2017>

this meeting, Transport & Environment has compiled data on the numbers of the dirty diesels that are being imported into Bulgaria and the toxic pollution they bring.

The data is summarized in the table below:

Age of vehicle imported	Total number of 2nd hand cars imported in 2017	Number of dirty diesels imported	Avg. NOx emissions (mg/km)
0-5 years	13,512	5,571	824
5-10 years	32,018	12,592	987
10-15 years	14,866	6,030	1,058
15-20 years	45,817	11,520	1,112

Notably, the data reveals:

- Last year alone Bulgaria imported over 100,000 second hand cars from EU-28 countries, over a **third of which were grossly polluting diesels**;
- More than half of the dirty diesels are over 10 years old and without the standard diesel particle filters found on all new cars after 2011, thus emitting dangerous cancer-causing fine particles that are already a serious problem in Bulgaria;
- As for toxic nitrogen dioxide, at the heart of the dieselgate scandal, the **dirty diesels imported to Bulgaria last year on average emit 12 times the current EU's NOx limit** – or 1,030 mg/km instead of the required 80mg/km (for cars on sale today);
- That means that an average dirty diesel car imported in 2017 would **emit 10 - 15 kg of toxic NOx pollution in one year** (based on the annual mileage of 10,000-15,000 km);
- Most cars came from Italy; with the Fiat-Chrysler group being on average the most grossly polluting diesel carmaker in Europe.³

The full data set is available upon request.

There is a clear need for **joint European measures to avoid second hand dirty diesels being dumped in Eastern and Central European countries**. This is against the principle of the Single Market and the spirit of its product rules - all EU citizens have equal right to clean air. The flow of old polluting diesels must be limited in a way that protects the environment and public health and is aligned with the Single Market rules. Notably, Euro 5 & 6 vehicles subject to mandatory or voluntary recalls in another European country (e.g. Volkswagen, Renault, Daimler, Fiat, Opel, etc.) should only be registered if they have undergone the required software or hardware upgrades before they will be accepted for import. Where companies agree to software upgrades or fixes in one country they should offer the same service in all countries. Shifting toxic pollution is not an answer; the ministers meeting on the 10th of April in Sofia should instead demand those guilty, the carmakers, to fix the problem they are responsible for.

³ T&E, 2016, <https://www.transportenvironment.org/publications/dieselgate-who-what-how>

Technical Annex

The calculation of exports to Bulgaria is based upon the following data.

- New vehicle sales data is taken from the European Environment Agency's (EEA) on new vehicle registrations;⁴ this is used to provide a database of which vehicles were sold in which countries in which years. This was used to calculate the proportion of dirty diesels sold.
- Emission exceedances, or the "dirtiness index", are taken from an earlier analysis⁵ by Transport & Environment and is based on the national emission investigations in France, Germany, the Netherlands, Spain and the UK, as well as the Emission Analytics⁶ database. A dirty diesel is one considered to have more than three the Euro standard emissions on the road;
- The ICCT pocketbook⁷ provided NOx factors, the share of diesel sales and the overall vehicle sales, supplemented by ACEA and Eurostat data for the late 1990s;
- Bilateral trade flows between EU-28 are taken from the vehicle import/export data compiled by DG Climate Action⁸, Öko-Institute⁹ and Eurostat Comext data. The data is part of T&E's in-house EUTRM model, developed by Cambridge Econometrics (more information available on request). This was used to show from which country in which years vehicles were exported to Bulgaria.

The estimates compiled are based upon a statistical relationship between the "dirtiness" of the diesels original sold in each country and those subsequently exported. In reality the cars are likely to have even higher emissions due to degradation of the exhaust control systems.

Further information

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⁴ EEA, 2016, <https://www.eea.europa.eu/data-and-maps/data/co2-cars-emission-13/CO2-emissions-cars-2016-final>

⁵ T&E, 2016, <https://www.transportenvironment.org/publications/dieselgate-who-what-how>

⁶ Emissions Analytics's EQUA Air Quality Index, <http://equaindex.com/equa-air-quality-index/>

⁷ The ICCT, 2017, <https://www.theicct.org/publications/european-vehicle-market-statistics-20172018>

⁸ European Commission, 2016, https://ec.europa.eu/clima/sites/clima/files/transport/vehicles/docs/2nd_hand_cars_en.pdf

⁹ Öko-Institute, 2011, <https://www.oeko.de/oekodoc/1114/2011-005-en.pdf>