



The Real Urban Emissions Initiative (TRUE)

Sheila Watson
Deputy-Director, FIA Foundation
London, June 7th, 2018



‘Safe, clean, fair & green’ – catalytic partnerships:

- Evidence
- Capacity-building
- Practical
- Advocacy



FOUNDATION



Dieselgate

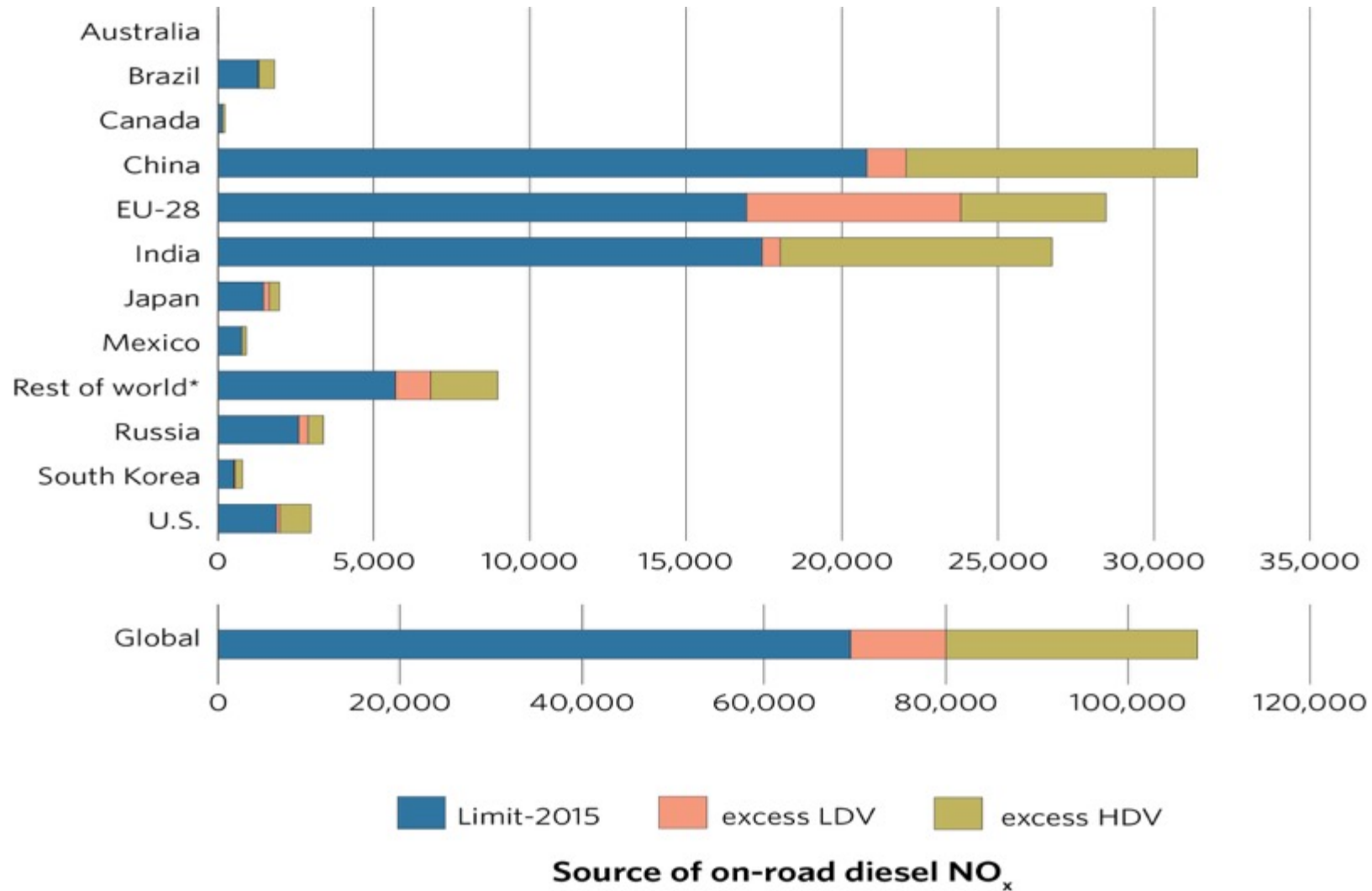
In May 2014, the ICCT exposed that two VW U.S. diesel cars tested in real world conditions exceeded Nox standards by 5x - 35x.

Culminated in civil and criminal penalties of more than \$20 billion.

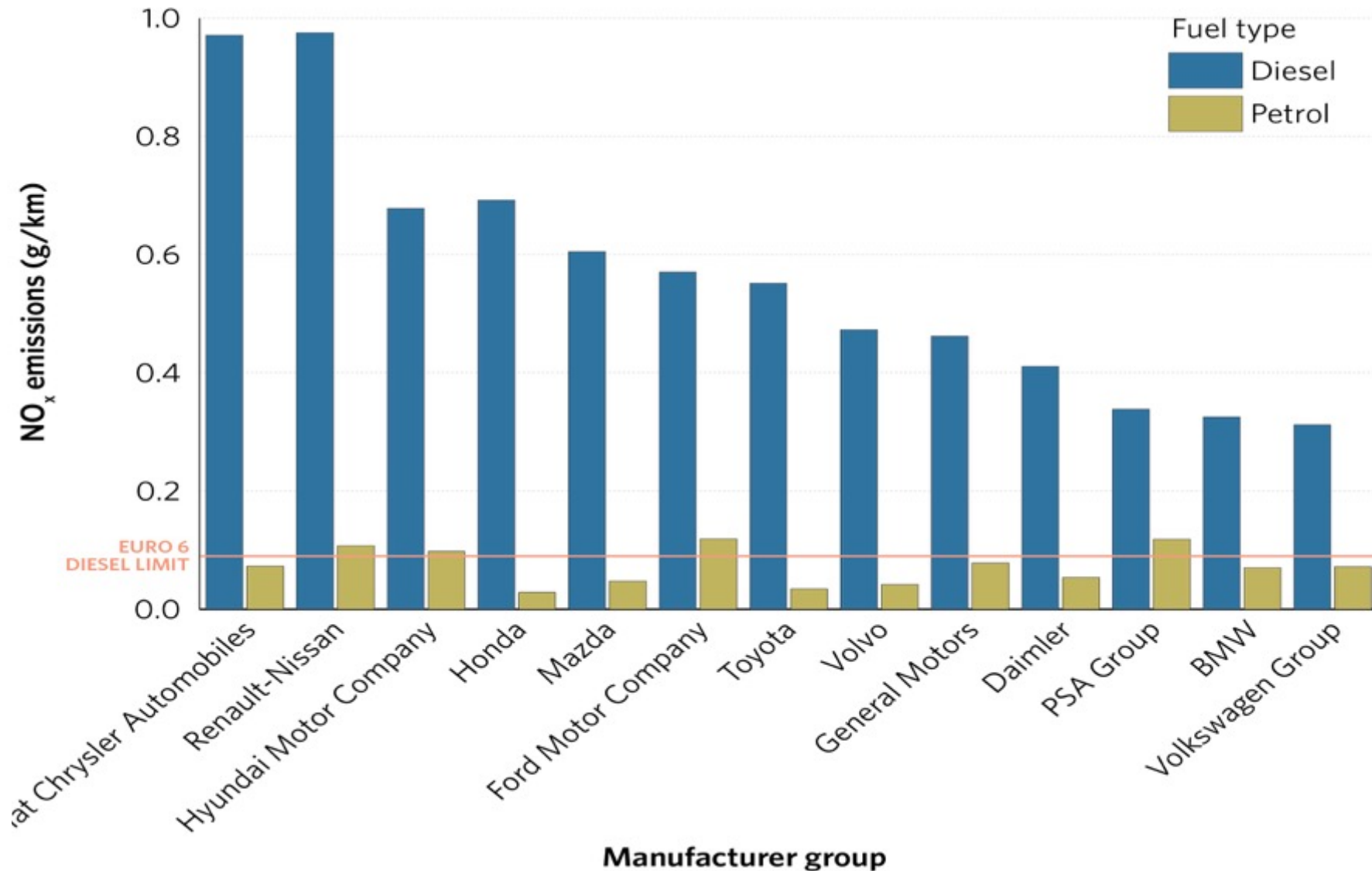
FIA Foundation hosted seminar of leading experts in 2016 – concluded **'independent checks'** were essential



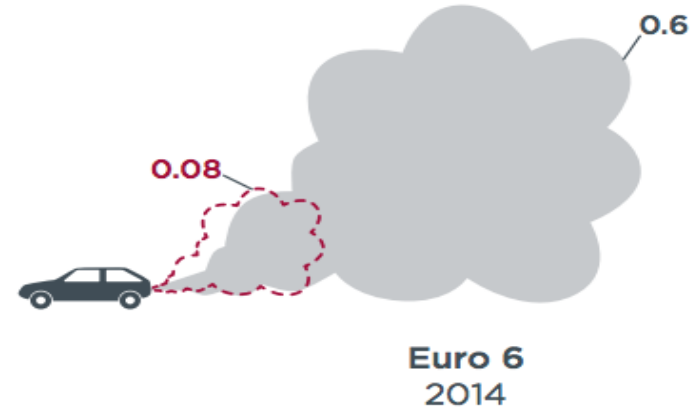
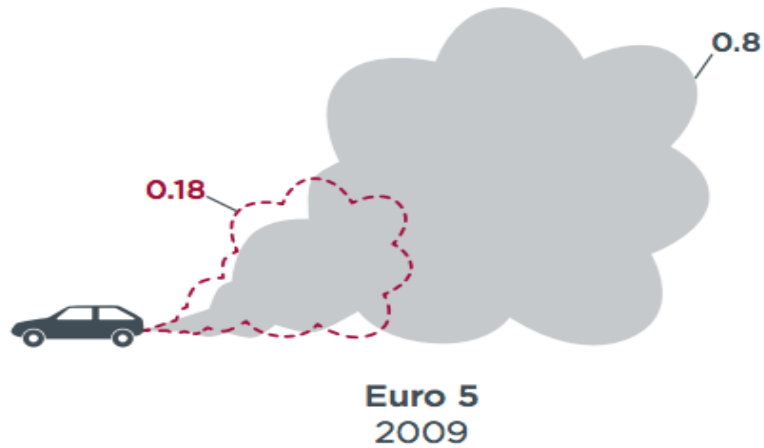
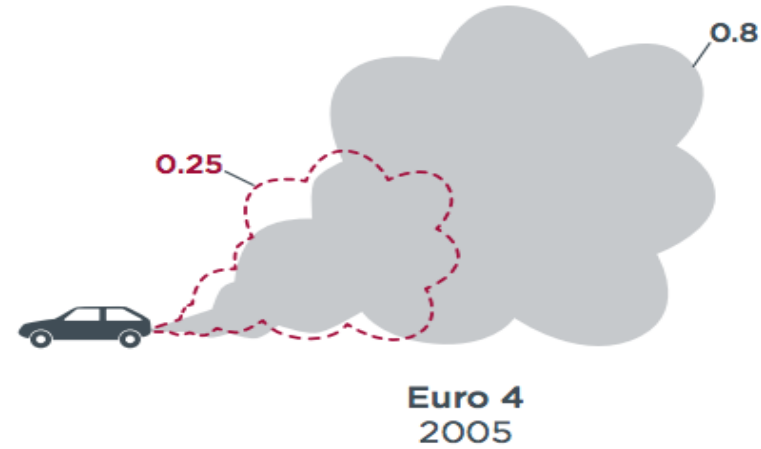
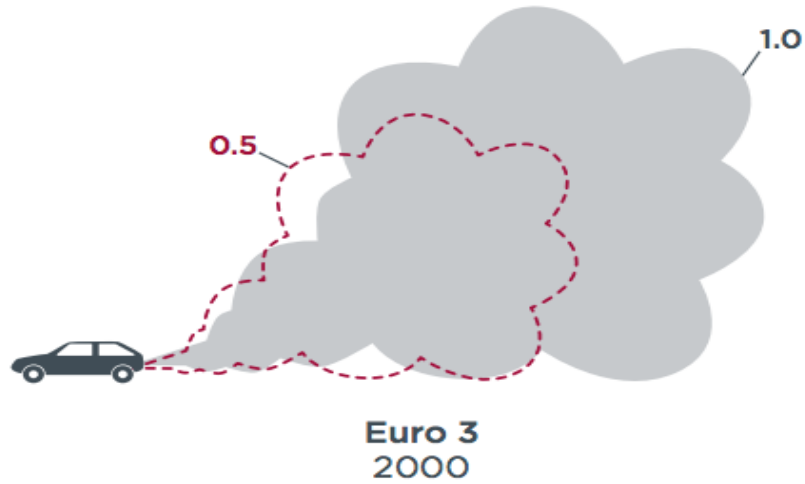
Problems throughout the diesel fleet - global



Problems throughout the diesel fleet - EU



Diesel emission reductions never delivered



■ On-road measured value (Carslaw, 2011) / (ICCT, 2014)
--- Euro emission limit

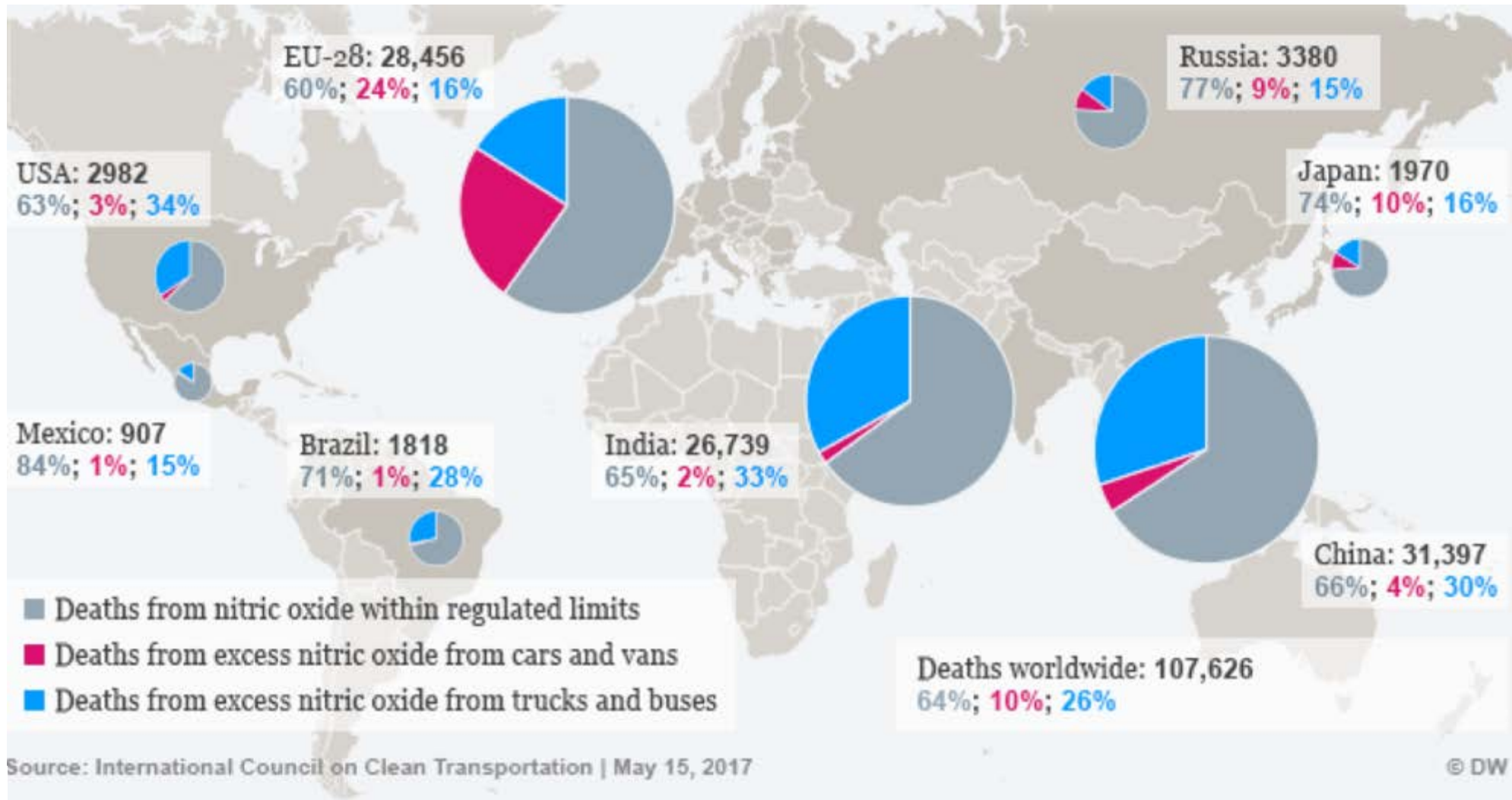
First global estimate of health impacts of real-world diesel NOx emissions (ICCT)

- The global diesel fleet is producing 50% more NOx emissions in the real-world
- 38,000 annual deaths are from these “excess” NOx emissions –1/3 of the 108,000 premature deaths from real-world diesel NOx
- More than 80% of the health impacts are in China, India, and EU-28
- More than 90% of future impacts can be avoided with HD Euro VI, strong RDE, and **effective compliance/enforcement**



May 25, 2017 Issue

In Europe, more than 11,000 people die early because of excess diesel NO_x emissions, every year



March 2017 – Paris & London launch partnership with TRUE

ENVIRONMENT | Wed Mar 29, 2017 | 10:44am EDT

Paris and London mayors announce scheme to gauge car emissions



London Mayor Sadiq Khan (L) and Paris Mayor Anne Hidalgo attend a meeting on air pollution in Paris, France, March 29, 2017. REUTERS/Gonzalo Fuentes

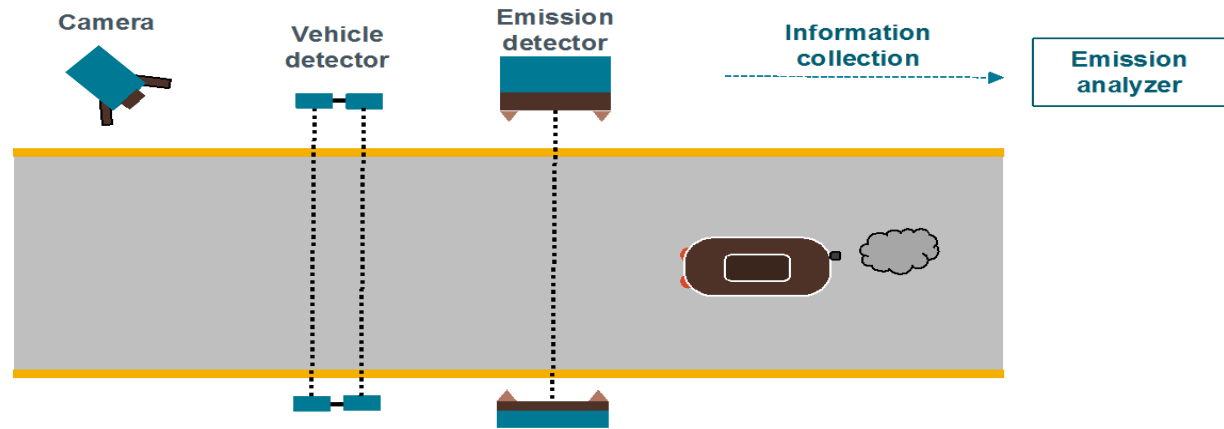
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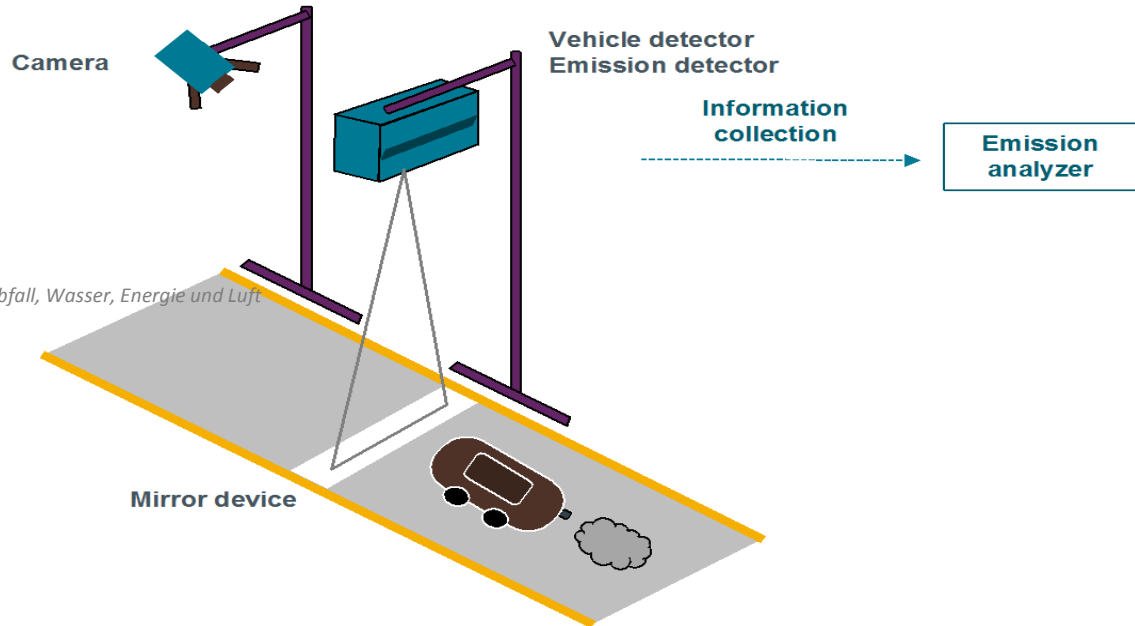
Remote sensing allows measuring the real-world emissions of thousands of vehicles



Horizontal stationary sensor



Vertical stationary sensor



Source: Kanton Zürich, Amt für Abfall, Wasser, Energie und Luft

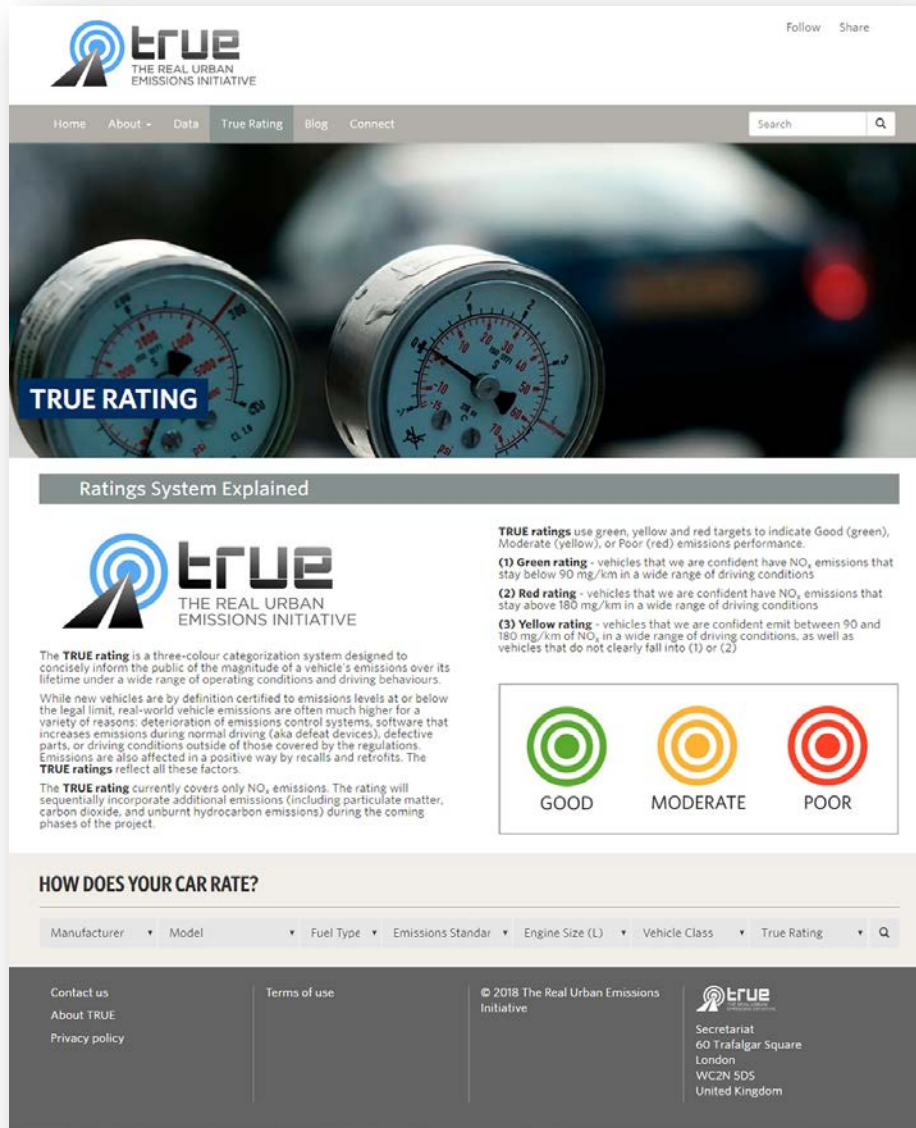
Source: <http://www.theicct.org/China-diesel-remote-sensing-regulation>



TRUE testing in south London – April 2018



THE TRUE RATING



The screenshot shows the TRUE website's 'Ratings System Explained' page. At the top, there's a navigation bar with 'Home', 'About', 'Data', 'True Rating', 'Blog', and 'Connect'. Below this is a large image of car gauges with the text 'TRUE RATING' overlaid. The main content area is titled 'Ratings System Explained' and features the TRUE logo and a detailed explanation of the three-color system. It includes three target icons labeled 'GOOD' (green), 'MODERATE' (yellow), and 'POOR' (red). Below the explanation is a search bar for 'HOW DOES YOUR CAR RATE?' with dropdown menus for 'Manufacturer', 'Model', 'Fuel Type', 'Emissions Standar', 'Engine Size (L)', 'Vehicle Class', and 'True Rating'. The footer contains contact information, terms of use, and privacy policy links.

TRUE RATING

Ratings System Explained

TRUE
THE REAL URBAN
EMISSIONS INITIATIVE

The **TRUE rating** is a three-colour categorization system designed to concisely inform the public of the magnitude of a vehicle's emissions over its lifetime under a wide range of operating conditions and driving behaviours.

While new vehicles are by definition certified to emissions levels at or below the legal limit, real-world vehicle emissions are often much higher for a variety of reasons: deterioration of emissions control systems, software that increases emissions during normal driving (aka defeat devices), defective parts, or driving conditions outside of those covered by the regulations. Emissions are also affected in a positive way by recalls and retrofits. The **TRUE ratings** reflect all these factors.

The **TRUE rating** currently covers only NO_x emissions. The rating will sequentially incorporate additional emissions (including particulate matter, carbon dioxide, and unburnt hydrocarbon emissions) during the coming phases of the project.

TRUE ratings use green, yellow and red targets to indicate Good (green), Moderate (yellow), or Poor (red) emissions performance.

(1) Green rating - vehicles that we are confident have NO_x emissions that stay below 90 mg/km in a wide range of driving conditions

(2) Red rating - vehicles that we are confident have NO_x emissions that stay above 180 mg/km in a wide range of driving conditions

(3) Yellow rating - vehicles that we are confident emit between 90 and 180 mg/km of NO_x, in a wide range of driving conditions, as well as vehicles that do not clearly fall into (1) or (2)

GOOD **MODERATE** **POOR**

HOW DOES YOUR CAR RATE?

Manufacturer Model Fuel Type Emissions Standar Engine Size (L) Vehicle Class True Rating

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Privacy policy

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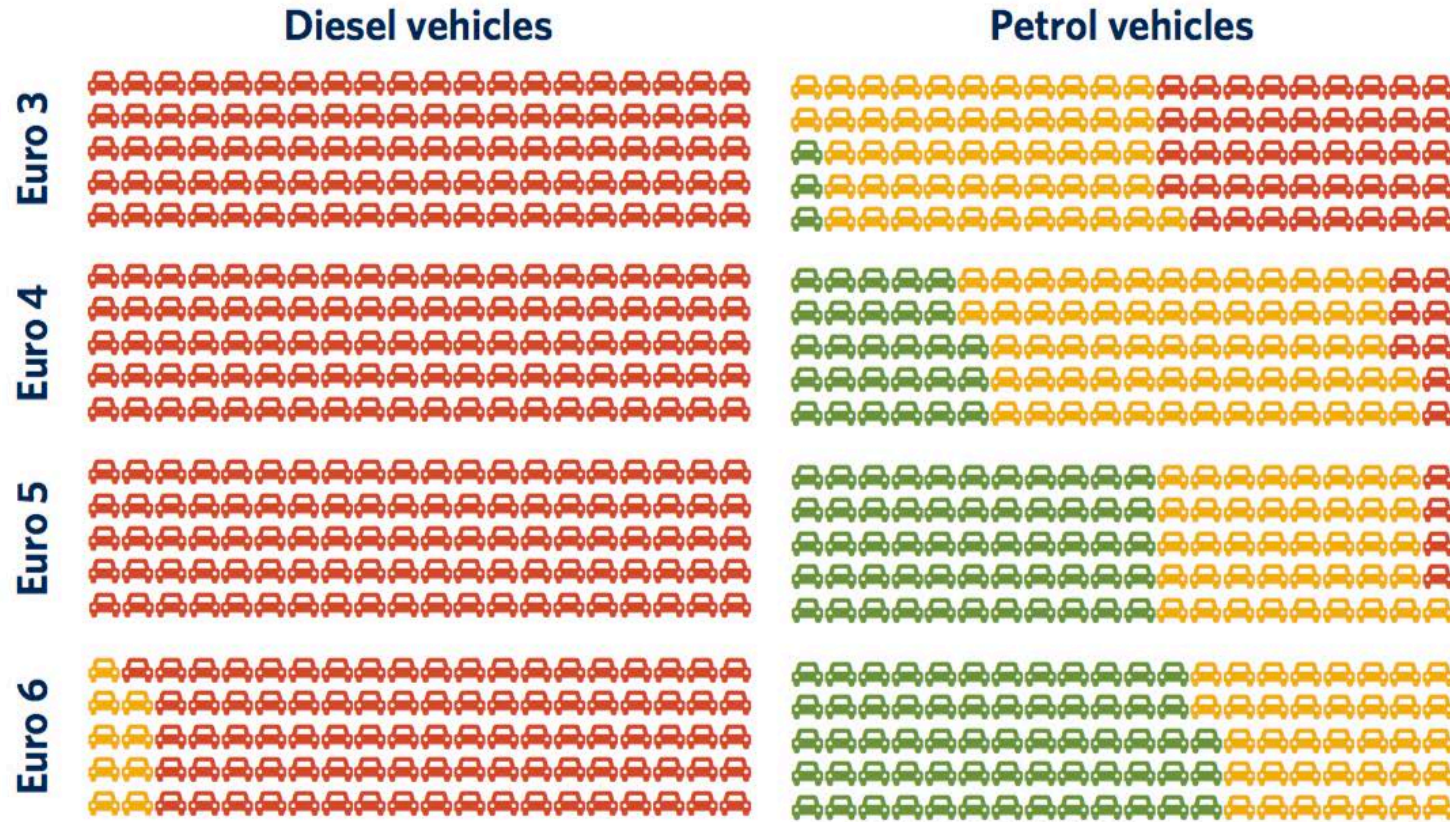
TRUE
THE REAL URBAN
EMISSIONS INITIATIVE

Secretariat
60 Trafalgar Square
London
WC2N 5DS
United Kingdom

- Three-colour system
- Green – good - lowest available in-use emissions
- Red – poor - emissions are 3 times or more than the latest emission limits.
- Informative for consumers, policymakers and manufacturers
- First results launched June 6th 2018– yesterday!



THE TRUE RATING – RESULTS*



TRUE rating: Good
 TRUE rating: Moderate
 TRUE rating: Poor
 1% of families

NOx emissions are **systematically** much higher for diesel cars, even for the newest Euro 6 models

All Euro 6 diesel models exceeded the Euro 6 diesel NOx emissions type-approval limits

Four manufacturers' Euro 6 diesel vehicles emitted more than 12 times the diesel type – approval limit for NOx, on average

The highest emitting vehicle family has emissions **18 times** above the Euro 6 type-approval limit.

*Note – does not yet include the latest testing in London, nor that which is planned for Paris – coming soon



FINANCIAL TIMES

All new diesel cars fail EU emissions standards, says study

Even worst-rated petrol vehicles fare better in real-world conditions, campaigners find



The Guardian

Pollution

'Impossible-to-cheat' emissions tests show almost all new diesels still dirty

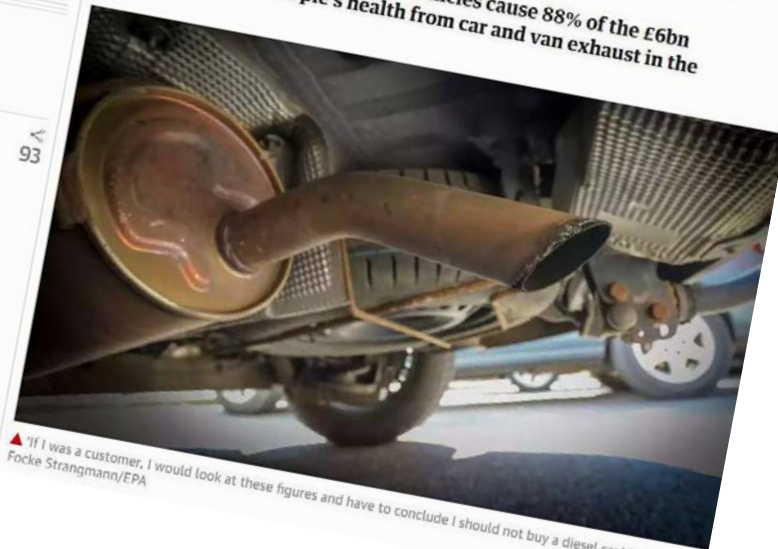
Other new research shows diesel vehicles cause 88% of the £6bn annual damage to people's health from car and van exhaust in the UK

Damian Carrington
Environment editor

@dpcarrington
Wed 6 Jun 2018 06:30 BST



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▲ 'If I was a customer, I would look at these figures and have to conclude I should not buy a diesel car.' Photograph: Focke Strangmann/EPA

Air pollution

Air pollution worse inside London classrooms than outside, study finds

Exclusive: study of schools in capital finds dangerous levels of fine particulate pollution within classrooms, putting children at risk

The Guardian

Sandra Laville

Thu 24 May 2018 11:55 BST



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INDEPENDENT

Environment

Each car in London costs NHS and society £8,000 due to air pollution, report finds

'We know the health impacts of air pollution, and now the economic case for cleaning up the air we breathe has been laid bare'

Josh Gabbatiss Science Correspondent | @josh_gabbatiss | 8 hours ago | 14 comments



Like Click to follow The Independent Online



Pollution from cars and vans costs almost £6bn in damage to health each year in the UK, according to a new study (Getty/iStock)

in schools. Photograph:

DAY ONE

THURSDAY, JUNE 7TH, BLOOMBERG LONDON

8:30 - 9:00	Coffee/Tea
9:00 - 9:30	Keynote Speech Drew Kodjak, Executive Director, ICCT
9:30 - 9:40	Introduction to Bloomberg London Kelly Shultz, Bloomberg
9:40 - 10:00	Workshop introduction Sheila Watson, FIA Foundation
10:00 - 10:40	Panel Session #1: The problem of real-world urban vehicle emissions - Part 1 Panel moderator - David Ward, Global NCAP Presentations: <ul style="list-style-type: none">• David Carslaw, York• Jens Borken, IIASA
10:40 - 11:00	Morning Coffee Break
11:00 - 12:00	Panel Session #1: The problem of real-world urban vehicle emissions - Part 2 Presentations: <ul style="list-style-type: none">• Zlatko Kregar, DG Environment• Rachel Muncrief, ICCT Discussion
12:00 - 13:00	Lunch Includes screening of video demonstrating remote sensing using EDAR technology
13:00 - 14:00	Panel Session #2: Case studies: London and Paris Panel moderator - Caroline Watson, C40 Cities Presentations: <ul style="list-style-type: none">• Elliot Treharne, Greater London Authority• Hervé Levifve, Paris Mayor's Office Discussion
14:00 - 15:30	Roundtable #1: City priorities Panel moderator - Sheila Watson, FIA Foundation
15:30 - 15:45	Afternoon Coffee Break
15:45 - 16:50	Breakout session #1: City priorities
16:50 - 17:00	wrap up
17:00 - 18:00	Remote sensing site visit (TBC)
18:00 - 19:30	Evening Cocktail Hour at Bloomberg London Hosted by the FIA Foundation

Panels - Some formal presentations – just to allow you to understand the initiative, but minimise talking at you

Roundtables - We want to learn as much about the cities here today as you all learn about our work

Breakouts - Informal & conversational
A chance for you to talk to each other also – and to the other experts in the room

Real remote sensing

All followed by a drink.....

DAY TWO

FRIDAY, JUNE 8TH, LONDON CITY HALL

9:00 - 9:30 Coffee/Tea

9:30 - 9:40 Day 2 Introduction

Shelina Watson, FIA Foundation

9:40 - 12:00 **Panel Session #3:**
City-level experiences in emissions measurement and programs to curb real world emissions

Panel moderator - Drew Kodjak, The ICCT

Presentations:

- Louise Duprez, City of Brussels
- Mónica del Carmen Jaimes Palomera, Mexico City, SEDEMA
- TBD, Transport Scotland
- Eunjung Choi, City of Seoul
- Kate Blumberg, The ICCT

Discussion

12:00 - 13:00 Lunch

13:00 - 13:20 **Keynote Speech followed by a short Q&A**

Shirley Rodrigues, Deputy Mayor for Environment and Energy, London

13:20 - 14:30 **Panel Session #4:**
Policy solutions for cities

Panel moderator - Rachel Muncrief, The ICCT

Presentations:

- Caroline Watson, C40 Cities
- Greg Archer, Transport and Environment
- Marcela Castillo, Mario Molina Center
- Eunjung Choi, City of Seoul
- Uwe Tietge, The ICCT

Discussion

14:30 - 14:45 Afternoon Coffee Break

14:45 - 15:45 **Breakout session #2: Integration of real world emission data into city policies**

15:45 - 16:30 **Roundtable #2: Discussion of learnings and next steps**

Panel moderator - Drew Kodjak, The ICCT

16:30 - 16:45 **Wrap up / Summary of next steps**

Real city-level experiences – policies, programmes and how to use real world emissions data

Keynote from our host the Greater London Authority – Deputy Mayor Shirley Rodrigues

Ultimately we want you all to better understand TRUE - what we do, what we want to achieve, and what it would take to work with us

THANK-YOU

www.trueinitiative.org