2020 Cars CO2 report
T&E webinar
T&E: WHO WE ARE

Europe's leading clean transport campaign group

26 Countries
61 Members
6 National experts

Mission (almost) Accomplished
T&E & compliance: long road to the 95g standard

T&E analysing EU car CO2 emissions since 2005...

Link to report
Part 1: Analysis of car sales (first half of 2020)
Unprecedented new car CO2 emissions drop

- Largest drop since car CO2 regulation began
- From 122 g/km in 2019 to 111 in H1 2020 (-9%)

BUT:
1. Recent increase in CO2 emissions: only -6% over since 2016
2. Rise in SUV sales continues: 39% in 2020
3. Growing gap between real world and official emissions.
CO2 emissions per country & carmaker

CO2 emissions per country, H1 2020

Source: T&E analysis of passenger car registration data from the first half of 2020 from JATO Dynamics.

CO2 emissions per OEM pool, H1 2020

Source: T&E analysis of H1 2020 passenger car registration data from JATO Dynamics.
Surge in electric car sales

» 8% in H1 2020 (EEA) or 7% EU27

Share of EV sales, H1 2020

Per country: https://transenv.eu/EVsales

Source: Transport & Environment analysis of ACEA Quarterly Alternative Fuel Vehicle Registrations
Electric car sales per country & carmaker

EV sales per country, H1 2020

Source: T&E analysis of ACEA quarterly registration statistics

EV sales per OEM, H1 2020

Source: T&E analysis of H1 2020 passenger car sales data from JATO Dynamics.
Part 2: Compliance with the CO2 target
Current gap to target

Most carmakers on track to meet CO2 targets after the first half of the year

‘Frontrunners’: PSA, Volvo, FCA-Tesla, BMW

‘On-track’ (less than 2 g/km gap): Renault, Toyota-Mazda, Nissan, Ford

Laggards: Kia, Volkswagen Group, Hyundai, Daimler, JLR
Generous flexibilities in EU regulation

95 gCO2/km target is actually 108 g/km target (average) with regulation flexibilities

**Total of 13 g/km:**
- Super-credit: 6.3 g/km
- 95% phase-in: 3.4 g/km
- Mass-adjustment: 2.3 g/km
- Eco-innovation credit: 1.3 g/km
Electric car sales in 2020/21: T&E compliance modelling

Source: Transport & Environment (T&E) modelling of carmakers’ compliance with the EU car CO2 standards
Widening portfolio of electric models

Battery electric car models only

<table>
<thead>
<tr>
<th>Carmakers</th>
<th>Pre-2020 models</th>
<th>H1 2020</th>
<th>H2 2020</th>
<th>2021</th>
</tr>
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<tbody>
<tr>
<td>PSA</td>
<td>Ampera-e, C-zero, iOn</td>
<td>e208, e2008, Corsa-e, DS 3 Crossback</td>
<td>e-C4</td>
<td>Mokka-e</td>
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<td>FCA</td>
<td>Model 3, S, and X</td>
<td>500e</td>
<td>Model Y</td>
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<td>i3</td>
<td>Mini</td>
<td>iX3, iNext, i4</td>
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<td>Zoe</td>
<td>Twingo</td>
<td>Dacia EV</td>
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<td>TOYOTA</td>
<td>MX-30, Lexus UX</td>
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<td>Leaf</td>
<td>Ariya</td>
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<td>Ioniq, Kona, e-Soul, e-Niro</td>
<td>Mach-E</td>
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<td>eGolf, e-tron, Taycan, Mii, Citigo, eUp!</td>
<td>e-tron Sportback</td>
<td>ID.3, ID.4, Cupra el-Born</td>
<td>Enyaq, ID.5, e-tron GT, Q4 e-tron</td>
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<td>I-Pace</td>
<td>XJ, J-Pace</td>
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<td>DAIMLER</td>
<td>EQ C, Fortwo, Forfour</td>
<td>EQ A, EQ B, EQ S, EQ E</td>
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</tr>
</tbody>
</table>

Total number of electric car models

Source: Source: Transport & Environment
How carmakers are closing the compliance gap

Mainly flexibilities in 2020

Mainly EVs in 2021
Individual carmaker strategies: 4 examples

Volkswagen Group:
- Balanced strategy with EV share of sales in line with market averages
- MEB BEVs bring down by 6 gCO2/km in 2020

Renault Group
- Largest contribution from EVs
- Zoe bring down by 15 g/km in 2020

FCA
- Fully relies on pooling with Tesla (+17 g/km without)
- Gap already very small in 2019

Daimler
- Large gap (9g/km) closed with increasing BEV, PHEV & HEV sales
- Other compliance pathways (e.g. pooling)
Part 3: What’s next?
EV momentum risks stagnating after 2021

> Trebling from 3% to 10% in 2020
>> Further surge to 15% in 2021
>>> Sluggish growth to a mere 20% EV sales in 2025 on current regulation

Where carmakers achieve CO2 bonuses & sell more than 20% EVs down to 11%
CO2 improvement is needed in 2025-2029

Almost no progress in 2020s just as electric cars reach price parity

Mission (almost) Accomplished

Current Policies trajectory is based on the current CO2 emissions reduction targets of -15% in 2025 and -37.5% in 2030.
What should the 2021 review do

CO2 targets
- Ambitious annual targets from 2025 onwards to achieve 100% zero emission sales in 2035
- No fuel inclusion/credits
- Remove mass-adjustment (technologically outdated)

PHEVs
- Remove 0.7 PHEV multiplier
- On-board fuel consumption meters (OBFCM) to measure real world CO2 emissions and utility factors (UF)

Just Transition
- Earmark ETS revenue for EU Automotive Transformation Fund
- Recovery funds to boost charging in buildings, business premises and across EU road network

Norway EV sales without mass-market models

EU EV market share for 2020 and 2021 is forecasted based on T&E modelling of carmakers compliance with the car CO2 emissions targets.
Thank you! Questions?

Link to report