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Adjustment DE-A regarding NOx from Road Vehicles

PREFACE

When deriving proposals for national emission ceilings for negotiations of the 1999 Gothenburg Protocol, sector-specific emission estimates for the year 2010 were calculated at IIASA using a set of scenarios which assumed various technological abatement measures, policy incentives, and legislation available / in place or planned at that time. As a result, the 2010 emission by road transport in Germany was estimated at NO $_{\rm x}$ (IIASA, 1999) $^{\rm 1}$). The over-all 2010 national emission ceiling (NEC) for NO $_{\rm x}$ was set to 1,081 kt. When negotiating the EU NEC Directive two years later, Germany agreed to reduce its NO $_{\rm x}$ emissions further, resulting in a NEC of 1,051 kt.

In its 2016 NEC emissions reporting, Germany provided a national total for NO_x emissions of 1,337 kt for 2010. However, this total includes emissions from agricultural soils and other source categories not accounted for when setting the NEC. In addition, some assumptions made in 1999, including on emission factors from road traffic, turned out to be wrong in reality. Like in many other European countries, non-compliance with the 2010 NEC as set in 1999 was partly not caused by failed national mitigation policies, but by changes beyond the control of, and unforeseen by, the individual Party or Member State.

In order to differentiate such changes from policy failures in the responsibility of the individual Parties to the Gothenburg Protocol, a procedure (Inventory Adjustment) allowing the adjustment of emissions resulting from new emission categories, changes in estimation methodologies, emission factors etc. provided within the EMEP/EEA Guidebook, or other effects beyond national control with respect to complying to emission reduction obligations (EB, 2012 a & c) ²⁾, ³⁾ was agreed. This procedure is applicable also for existing NECs (EB, 2012b) ⁴⁾.

With respect to road transport, such an unforeseeable effect was the partial failure of several so-called "Euro norms" set on the EU level to reduce emissions from road vehicles. In this report, Germany presents an estimate of the NO_x emissions resulting from the partial failure of the mitigation policy reflected by the Euro norms, and lays out the calculations leading to these estimates.

REASONS FOR MISSING THE GOTHENBURG CEILINGS

The TREMOD methodology applied for estimating emissions from road transportation in Germany has changed over time. These changes include updates of emission factors (EF) for various pollutants and other changes such as an extension of vehicle classification (and thus inclusion of emission factors associated with these new vehicle sub-categories) to improve the estimation's accuracy.

The main changes occurred for the emission factors and for the Heavy Duty Vehicles (HDV) fleet structure. This last point led to changes in emissions because of the reallocation of activities (consumption/traffic) between the sub-categories of vehicles.

For the formalism of the adjustments, it is difficult to flag whether the modifications for road transport are due to "methodological changes" or due to "changes of emission factor". Therefore, only the term "change of methodology" will be used (even if at the NFR reporting level this may seem like a simple change in EFs).

So far as road transport is concerned, the inability to attain the emission ceiling is most likely to have been affected by a combination of technological changes within the fleet (which of course made their way into the several versions of TREMOD) combined with greater than originally expected dieselisation of the fleet.

ANALYSING THE PROBLEM: THE EUROPEAN PERSPECTIVE BASED ON COPERT

Already in 2011, these effects were demonstrated by Ntziachristos and Papageorgiou (2011). Here, the impacts of changing model versions and activity data in the context of meeting the EU NEC Directive ceiling commitments were examined for four European countries including Germany. Unfortunately, this comparison study was carried out within a COPERT environment. Therefore, the results gained cannot be transferred to the German TREMOD environment on a one-to-one level but nonetheless allow a highly illustrative insight in the reasons for not meeting the set ceiling. The study modeled fuel consumption and NO_x emissions for four selected countries (Germany, France, Netherlands and Belgium) and found higher NO_x emissions were estimated for the road transport sector than originally modelled by the RAINS model of IIASA (which underpinned the setting of 2010 ceilings). For Germany, this study shows that with the same activity data set (LIFE+

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EC4MACS data from Amann et al. (2010)), NO_x emissions estimated with COPERT II vs. COPERT 4 (v8.0) increase from 410 kt to 518 kt due to methodological changes, a difference of 282 kt. An additional consideration of changes in AD would lead to 620 kt of NO_x . However, as changes in AD are no valid adjustment reason, the latter value is for information only.

This was mainly due to: $* NO_x$ "artificial" current emissions = virtual current emissions assuming no changes in emission factors emission factors updated in COPERT 4 that did not follow the reductions as set by the emission standards for diesel passenger cars; * important part of diesel fuel consumption in the total fuel consumption of the road traffic.

The results of this study showed that it is the combination of different parameters which might affect the ability (to different extents) of a Party to attain the emission ceilings. In other words, the exceeding of NO_x ceilings for road transport is due to:

Changes in methodology and emission factors

As these technologically driven changes (as reflected in the <u>evolution of the different so-called Euro norms</u>) lie outside the country's responsibility, current methodology and EFs have to be adjusted in a way to allow the comparison of the actual inventory and the Gothenburg ceilings.

Changes in the activity data

As the development of mileage driven and fuels used within a country (<u>Germany: stronger dieselisation</u> then originally expected) is of the country's responsibility, this effect has to be excluded from any adjustment estimation.

IN-COUNTRY ANALYSIS: THE TREMOD PERSPECTIVE

INITIAL ASSUMPTION

In order to estimate the effect of NO_x emissions resulting from the failure of the so-called Euro norms, the following procedure has been agreed by expert review teams in the last two years:



proposed amount of adjustable emissions = current AD x current EF - current AD x original EF = current AD x (current EF - original EF) = current EM - "artificial" current EM¹

¹ "artificial" current emissions = virtual current emissions assuming no changes in emission factors



with

- **EM**_{adjustment} = amount of emissions to be subtracted from National Totals
- **AD**_{current} = AD from latest TREMOD version as used for current submission
- **EF**_{current} = EF from latest TREMOD version as used for current submission
- **EF**_{original} = EF from TREMOD version used at the time NEC ceilings were set (here: TREMOD 3.1)
- **EM**_{current} = EM estimated from AD and EF from latest TREMOD version = EM reported for NFR 1.A.3.b with latest submission
- **EM**_{curent "artificial"} = EM estimated from AD from latest TREMOD version and EF from TREMOD version used at the time NEC ceilings were set (here: TREMOD 3.1)

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APPLYING THE ORIGINAL METHODOLOGY

FRAMEWORK INFORMATION

The methodology used for estimating Germany's exhaust emissions from road transport when determining emissions ceilings of the Gothenburg Protocol (1999), was the second version of the EMEP/CORINAIR guidebook corresponding to COPERT II software. This method proposed NO_x emission factors for

- passenger cars (PC): up to Euro 1
- light commercial vehicles (LCV2): up to Euro 1
- heavy duty vehicles (HDV): pre-EURO I only (conventional)

Back than, without better knowledge, the emission factors for the most recent standards were derived by directly applying the expected reductions in emission standards.

However, as Germany does not use COPERT for compliling its road transport emissions inventory but a national model called TREMOD, the following comparison has to be carried out between the oldest version of TREMOD still available and the version as applied for the current inventory submission (2021).

Unfortunately, the oldest TREMOD version available for such comparison is TREMOD 3.1 from 2002 5 , including the following set of NO_x emission factors:

- passenger cars (PC): up to Euro 4
- light commercial vehicles (LCV): up to Euro 4
- heavy duty vehicles (HDV) only up to EURO V

However, as this version includes the technocological development since 1999 (when the ceilings were set based on COPERT II), the results from this analysis and the adjustment proposal based upon these results are likely to slightly underestimate the effect of technological changes since 1999 and must tehrefore be considered conservative.

THE COMPARISON

Application of the original NO, methodology to the current road transport background activity data

The basic activity data (such as over-all fuel sold and traffic mileages by vehicle type, by fuel or by Euro regulation) implemented in TREMOD 3.1 differ significantly from those of the current TREMOD version especially for the more recent years as of 2005. In addition, specific activity data (such as fuel consumptions per vehicle type, per fuel or per Euro regulation) strongly depend on the TREMOD version.

Within this report, Germany re-estimates the NO_x emission within the TREMOD 3.1 model. To isolate the requested information, the original TREMOD 3.1 activity data was combined with emission factors from both TREMOD 3.1 and the currently used TREMOD 6.12 (Knörr et al., 2020a) ⁶).

Description of the updated methodology used

The updated methodology, used in 2019 (for NFR submission 2021) and implemented in version 6.12 of the TREMOD software, considers emission factors of

- passenger cars (PC) up to Euro 6d
- light commercial vehicles (LCV) up to Euro 6d
- heavy duty vehicles (HDV) up to EURO VI

and

• motorized two-wheelers (M2W) up to Euro 4

Comparison of emission estimates made using the original and updated methodologies

The values of NO_x emissions presented in the table below are estimated with:

• TREMOD 3.1 model equations as initial methodology

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and,

• TREMOD 6.12 equations as methodology applied for NEC submission 2021.

The activity data applied to initial (here: oldest available) and most recent methodology, are those of the latest inventory provided with NEC submission 2021.

Table 1: Resulting adjustment proposal 2020

| for year | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| proposed adjustment | -296.1 | -300.7 | -300.4 | -305.2 | -294.9 | -274.9 | -250.9 | -221.1 | -179.6 | -144.8 |

The following screenshots show the TREMOD 3.1 / TREMOD 6.12 implementation comparisons per vehicle type/fuel/Euro regulation.

Activity Data

- current: from TREMOD 6.12, as reported with the latest inventory submission
- adjusted: has to be similar to current AD!
- difference: as only recent AD are to be used for adjustment estimations, this value must be zero!

Implied Emission Factor

- current: representing the ratio of current emissions and current AD
- adjusted: representing the ratio of adjusted emissions and current AD
- difference: shows percentual difference

NO, Emissions

- **current**: from TREMOD 6.12, as reported with the latest inventory submission
- adjusted: estimated based on TREMOD 3.1 methodology and TREMOD 6.12 AD
- adjustment: adjusted emissions minus current emissions
- difference: percentual difference between current and adjusted emissions

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| Adjustment o | werview fo | ryear | 2010 to 201 | 9 | | | | | | | | |
|--------------------------|--------------------------|-------|----------------------|----------------------|----------------------|---------------------|------------------|----------------------|---------------------------|---------------------------|--------------------------|----------------------|
| | | | | ctivity Data | | | Emission | | | NO, Emi | | |
| NFR Code | Fuel | Year | current in [| adjusted o | difference in [%] | current a in [kg | | difference in [%] | current | adjusted in [kg] | adjustment | difference in [%] |
| 1.A.3.bi | gasoline | | 796.957 | 795.957 | 0% | 97,55 | 84,99 | -13% | 77,644,842 | 67,650,906 | 9.993.935 | -13% |
| 1.A.3.b1 | diesel oil | | 529,300 | 529,300 | 0% | 429,46 | 160,51 | -63% | 227.341.096 | 84.970.461 | 142.370.635 | -63% |
| 1.A.3.b ii | gasoline | | 6.325 | 6.325 | 0% | 255,87 | 214,75 | -19% | 1.618.432 | 1.358.328 | 260.104 | -16% |
| 1.A.3.bii | diesel oil | | 113,450 | 113,450 | 0% | 476,34 | 134,96 | -72% | 54.040.533 | 15.311.584 | 38.728.949 6.747.534 | -72% |
| 1.A.3.bii 1.A.3.bii | diesel oil diesel oil | | 48.844 566.741 | 48.044 566.741 | 0% 0% | 623,00 445,67 | 482,55 271,83 | -23% -39% | 29.931.266 253.148.243 | 23.183.732 154.056.160 | 99.092.083 | -23% -39% |
| 1.A.3.biv | gassine | | 19.712 | 19.712 | 0% | 113,68 | 168,43 | 48% | 2.240.749 | 3.320.034 | -1.079.285 | 48% |
| 1.A.3.b TOT | | 2010 | 2.079.608 | 2.079,608 | 0% | | | 0% | 645.965.162 | 349.851.206 | 296.113.956 | -46% |
| 1.A.3.b1 | gasoline | | 794.688 | 794,688 | 0% | 92,09 | 81,61 | -11% | 73.185.851 | 64.851.951 | 8.333.900 | -11% |
| 1.A.3.bi | diesel oil | | 553.564 | 553.564 | 0% | 434,12 | 159,22 | -63% | 240.313.791 | 88.138.959 | 162,174,832 | -63% |
| 1.A.3.bii 1.A.3.bii | gasoline diesel oil | | 6.118 115.967 | 6.118 115.967 | 0% 0% | 229,36 481,55 | 198,57 | -13% -74% | 1.403.081 55.844.518 | 1.214.776 | 41.125.375 | -13% -74% |
| 1A3.bii | diesel oil | | 47.365 | 47.365 | 0% | 692,66 | 448,99 | -24% | 28.071.221 | 21.266.323 | 6.884.898 | -24% |
| 1A3bii | diesel oil | | 563.891 | 563.891 | 0% | 410,38 | 244,97 | 40% | 231.410.271 | 138.136.342 | 93.273.929 | 41% |
| 1.A.3.b W | gaseline | | 19.289 | 19.289 | 0% | 110,79 | 171,60 | 54% | 2.137.002 | 3.299.162 | -1.162.160 | 54% |
| 1.A.3.b TOT | | 2011 | 2.100.883 | 2.100.883 | 0% | | | 0% | 632.365.736 | 331,625,655 | 300.740.081 | -48% |
| 1.A.3.bi | gaseline | | 750.957 | 750.957 | 0% | 85,73 | 78,00 | -9% | 64.379.994 | 58.577.229 88.096.699 | 5.802.765 | -9% |
| 1.A.3.bii 1.A.3.bii | diesel oil gasoline | | 555.245 5.657 | 555.245 5.657 | 0% 0% | 435,96 218,93 | 158,66 193,15 | -64% -12% | 1,238,520 | 1.092.662 | 153.966.203 | -64% -12% |
| 1A3.bii | diesel oil | | 114.350 | 114,350 | 0% | 481,91 | 120,17 | -75% | 55.106.382 | 13.741.354 | 41.365.028 | -75% |
| 1A3bii | diesel oil | | 50.902 | 50.902 | 0% | 533,22 | 384,33 | -28% | 27.141.913 | 19.963.208 | 7.578.704 | -28% |
| 1.A.3.b III | diesel oil | | 589,585 | 589,585 | 0% | 381,33 | 224,00 | -41% | 224.829.180 | 132.064.753 | 92.764.428 | -41% |
| 1.A.3.b iv | gasoline | | 18.268 | 18.268 | 0% | 107,43 | 173,28 | 61% | 1.962.546 | 3.165.439 | -1.202.893 | 61% |
| 1.A.3.b TOT | | 2012 | 2.084.964 | 2.084,964 | 0% | 92.00 | 24.05 | 2% | | 316.301.343 | 300.420.094 | -49% -7% |
| 1.A.3.bi 1.A.3.bi | gasoline diesel oil | | 749.114 589.131 | 749.114 589.131 | 0% 0% | 80,35 437,14 | 74,85 | -7% -64% | 60.190.007 257.533.728 | 56.071.797 93.499.010 | 4.118.211 | -7% -64% |
| 1.A.3.bii | gasoline | | 5.578 | 5.578 | 0% | 202,80 | 184,07 | -95 | 1.131.209 | 1.026.727 | 184.482 | -91% |
| 1.A.3.bii | diesel oil | | 118.777 | 118.777 | 0% | 480,60 | 114,93 | -76% | 57.083.533 | 13,650,488 | 43,433,045 | -76% |
| 1.A.3.b III | diesel oil | | 51,716 | 51,716 | 0% | 509,54 | 360,06 | -29% | 26.350.969 | 18.620.843 | 7.730.126 | -29% |
| 1.A.3.bii | diesel oil | | 600.139 | 600.139 | 0% | 353,06 | 207,93 | -41% | 211.887.531 | 124.788.469 | 87.099.062 | -41% |
| 1.A.3.b W | gasoline | 2042 | 18.229 | 18.229 | 0% | 194,34 | 175,38 | 68% | 1.902.088 | 3.197.038 | -1.294.951 | 68% |
| 1.A.3.b TOT 1.A.3.b i | gasoline | 2013 | 2.132.683 752.526 | 2.132.683 752.526 | 0% | 76.03 | 73.09 | 4% | 616,079,063 57,215,533 | 54.998.921 | 2.216.612 | -50% -4% |
| 1A3.bi | diesel oil | | 626.045 | 626.045 | 0% | 435,87 | 159,12 | -63% | 272.876.061 | 99.613.892 | 173.262.169 | -63% |
| 1.A.3.bii | gaseline | | 5.845 | 5.845 | 0% | 190,34 | 176,49 | -7% | 1.112.584 | 1.031.612 | 80.972 | -7% |
| 1.A.3.bii | diesel oil | | 128,578 | 128.578 | 0% | 475,56 | 110,96 | -77% | 61.146.575 | 14.267.237 | 46.879.338 | -77% |
| 1.A.3.bii | diesel oil | | 49.143 | 49.143 | 0% | 468,37 | 339,99 | -27% | 23.017.115 | 16.708.234 | 6.308.881 | -27% |
| 1.A.3.b II | diesel oil | | 572.754 18.673 | 572.754 18.673 | 0% | 314,05 | 196,05 | -38% 78% | 179.874.133 1.878.294 | 112.285.582 3.346.794 | 67.588.551 -1.468.499 | -38% 78% |
| 1.A.3.b TOT | gasoline | 2014 | 2.153.563 | 2.153.563 | 0% | 100,59 | 179,24 | 78% 0% | 597.120.297 | 302,252,271 | 294,868,025 | 495 |
| 1.A.3.bi | gasoline | 2014 | 715.156 | 715.156 | 0% | 74,38 | 71,73 | -4% | 53.190.787 | 51.300.983 | 1.889.905 | -4% |
| 1.A.3.bi | diesel oil | | 645,565 | 645,595 | 0% | 426,19 | 159,80 | -63% | 275.130.233 | 103.163.501 | 171.966.732 | -63% |
| 1.A.3.bii | gasoline | | 5.793 | 5.793 | 0% | 187,12 | 172,80 | -8% | 1.083.927 | 1.000.999 | 82.928 | -8% |
| 1.A.3.b ii | diesel oil | | 135.306 | 135.306 | 0% | 469,35 | 107,96 | -77% | 63.505.443 | 14.907.490 | 48.897.953 | -77% |
| 1.A.3.bii | diesel oil | | 52.287 589.411 | 52.287 589.411 | 0% | 458,96 | 327,99 187,51 | -29% -30% | 23.997.817 157.109.676 | 17.149.448 | 6.848.370 46.668.973 | -29% -30% |
| 1.A.3.bii 1.A.3.biv | diesel oil gasoline | | 18.459 | 18,459 | 0% | 266,69 99,32 | 100,65 | 82% | 1.833.382 | 3.334.472 | -1.501.090 | 82% |
| 1.A.3.b TOT | | 2015 | 2.161.976 | 2.161.976 | 0% | 99,06 | 100,000 | 0% | | 301,077.596 | 274.853.670 | -48% |
| 1.A.3.bi | gasoline | | 715.272 | 715.272 | 0% | 70.93 | 70,65 | 0% | 50.736.967 | 50.535.049 | 201.918 | 0% |
| 1.A.3.bi | diesel oil | | 675.119 | 675.119 | 0% | 410,36 | 160,76 | -61% | | 108.535.230 | 168.506.430 | -61% |
| 1.A.3.b ii | gasoline | | 5.926 | 5.926 | 0% | 190,27 | 171,06 | -5% | 1.068.292 | 1.013.678 | 54.614 | -5% |
| 1.A.3.bii | diesel oil | | 144.068 | 144.068 54.157 | 0% 0% | 456,12 424,73 | 105,62 308,24 | -77% -27% | 65.712.732 23.002.109 | 15.216.007 | 50.496.726 6.388.992 | -77% -27% |
| 1.A.3.bii 1.A.3.bii | diesel oil | | 54.157 594.013 | 594,013 | 0% | 226,31 | 100,97 | -20% | 134.431.899 | | 26.935.637 | -20% |
| 1.A.3.biv | gasoline | | 18.785 | 18.785 | 0% | 96.14 | 181,66 | 89% | 1.005.097 | 3.412.476 | -1,606,579 | 89% |
| 1.A.3.b TOT | | 2016 | 2.207.339 | 2.207.339 | 0% | | | 0% | 553.799.558 | 302,901,820 | 250.897.738 | -45% |
| 1.A.3.bi | gasoline | | 724.571 | 724.571 | 0% | 67,66 | 69,88 | 3% | 49.026.874 | 50.634.714 | -1.607.840 | 3% |
| 1.A.3.b1 | diesel oil | | 696.592 | 696,592 | 0% | 390,66 | 161,95 | -59% | 272.126.091 | 112.810.721 | 159.315.370 | -59% |
| 1.A.3.bii 1.A.3.bii | gasoline discol of | | 6.186 153.284 | 6.186 153,284 | 0% 0% | 171,15 424,66 | 167,18 | -76% | 1.058.799 65.093.930 | 1.034.211 | 24.588 | -76% |
| 1A3.bii | diesel oil diesel oil | | 153.284 53.382 | 153.284 53.382 | 0% | 370,80 | 286,71 | -79% | 19.793.901 | 15.304.828 | 4.489.073 | -79% |
| 1A3.bii | diesel oil | | 598.263 | 598.263 | 0% | 195,02 | 175,92 | -10% | 116.671.141 | 105.245.508 | 11.424.633 | -10% |
| 1.A.3.b iv | gasoline | | 19,160 | 19,160 | 0% | 92,83 | 183,39 | 98% | 1.778.674 | 3.513.787 | -1.735.114 | 98% |
| 1.A.3.b TOT | AL | 2017 | 2.251.437 | 2.251,437 | 0% | | | 0% | | 304.469.986 | 221.079.424 | 42% |
| 1.A.3.b1 | gasoline | | 699.027 | 699.027 | 0% | 64,42 | 68,36 | 6% | 45.032.996 | 47.786.817 | -2.753.820 | 6% |
| 1.A.3.bi | diesel oil | | 666.074 | 666.074 | 0% | 371,66 | 163,30 | | 247.556.063 | | | -56% |
| 1A3bii 1A3bii | gasoline diesel oil | | 6.315 154.259 | 6.315 154.259 | 0% 0% | 158,22 384,71 | 160,11 | 75% -73% | 999.199 59.344.525 | | | 1% -73% |
| 1.A.3.b ii | diesel oil | | 51.634 | 51,634 | 0% | 309,76 | 263,53 | | 15.993.526 | | | -15% |
| 1A3bii | diesel oil | | 585.186 | 585,186 | 0% | 171,18 | 172,10 | | 100.173.337 | | -537.532 | 1% |
| 1.A.3.b iv | gasoline | | 18.497 | 18.497 | 0% | 89,66 | 184,61 | 100% | 1.658.558 | 3.414.767 | -1.756.209 | 100% |
| 1.A.3.b TOT | AL. | 2018 | 2.180.993 | | 0% | | | | 470.758.206 | | | -38% |
| 1.A.3.bi | gasoline | | 704.691 | 704.691 | 0% | 62,30 | 68,45 | 10% | | | -4.336.084 | 10% |
| 1.A.3.b1 | diesel oil | | 663.841 | 663,841 | 0% | 345,01 | 165,07 | -52% 5% | 229.566.088 976.219 | | 119.983.106 -47.931 | -52% 5% |
| 1.A.3.bii 1.A.3.bii | gasoline diesel oil | | 6.683 159.183 | 6.683 159,183 | 0% 0% | 146,08 347,42 | 153,25 | | 976.219 55.303.336 | | | -71% |
| 1A3.bii | diesel oil | | 52,939 | 52.939 | 0% | 274,41 | 247,81 | | 14.527.012 | | | -10% |
| 1.A.3.b ii | diesel oil | | 596.913 | 595.913 | 0% | 153,36 | 169,17 | | 91.380.700 | 100.809.376 | -9.428.676 | 10% |
| 1.A.3.b iv | gasoline | | 18.750 | 18.750 | 0% | 86,05 | 186,83 | 117% | | | | 117% |
| 1.A.3.b TOT | AL | 2019 | 2.202.000 | 2.202,000 | 0% | | | 0% | 437.268.744 | 292,497,497 | 144.771.248 | .33% |

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| | | | | ectivity Date | | | ed Emission | | | NO, Emi | | |
|-------------------|------------|------------------|-----------|---------------|------------|---------|-------------|------------|-------------|-------------|--------------|----------|
| NFR Code | Fuel | | current | adjusted | difference | current | adjusted | difference | Current | adjusted | adjustment | differen |
| | | | in (| D) | in [N] | in p | (LT/gr | in [5] | | in [kg] | | in [5] |
| | | ребиз | 13,686 | 13,686 | 8% | 884.76 | 614.25 | -12% | 7.996.060 | 6.986.917 | -969.143 | -4 |
| | | Eura 1 | 76.661 | 26,661 | 8% | 338.60 | 207,71 | -30% | 25,915,925 | 19,199,262 | -3716.663 | -0 |
| | | Eura 2 | 96.425 | 96.425 | 8% | 172.06 | 135.03 | -22% | 16,590,020 | 13.020.026 | -3 569 995 | 4 |
| | | Euro 3 | 133,139 | 133,139 | 8% | 58.51 | 70.18 | 20% | 7,790,384 | 9.343.433 | 1.553.129 | 2 |
| | Gassline | Euro 4 | 444,991 | 444.991 | 25 | 42.27 | 42.19 | 0% | 18,811,389 | 18,773,529 | -37,859 | |
| | | Euro S | 31,234 | 31,234 | 05 | 18.61 | 42.19 | 127% | 581,142 | 1.317.737 | 736.595 | 12 |
| | | Euro 6 | 31,234 | 31,234 | 05 | 25.08 | 42.19 | 62% | 201.142 | 1.511.131 | 7.36.230 | 14 |
| | | | | | | | | | | 27 480 004 | 0.003.016 | |
| 1.A.3.b i . | | Gasoline total | 795,957 | 795.957 | 0% | 97,55 | 84,99 | .135 | 77.644.042 | 67,650,986 | .9.993.935 | - 4 |
| Passenger Cars | | he-Ens | 1.916 | 1,916 | 9% | 310,13 | 264,96 | -10% | 689.760 | 687.256 | -96.506 | - |
| Cars | | Ews 1 | 10.338 | 10.338 | 9% | 296.62 | 296,17 | -11% | 3.066.428 | 2.741.307 | -325.121 | - |
| | | Euro 2 | 50.068 | 50.068 | 9% | 406,90 | 219,19 | -46% | 20.372,795 | 10.974.210 | -9.398.584 | - 4 |
| | Diesel Oil | Earn 3 | 134,025 | 134,025 | 8% | 542,04 | 178,54 | -61% | 72.646.173 | 23.929.296 | 48,716,957 | 4 |
| | Date of | Euro 4 | 279.154 | 279,154 | 9% | 384,37 | 140,58 | -63% | 107.299.100 | 39.243.811 | -68.055.349 | 4 |
| | | Euro 5 | 53.547 | 53.547 | 0% | 434.70 | 140.58 | -60% | 23.276.735 | T.52T.796 | -15,749,829 | - 4 |
| | | Euro 6 | 334 | 334 | 9% | 267,62 | 140.58 | -45% | 86,044 | 46.953 | -39.891 | 4 |
| | | Diesel oil tutal | 529,380 | 529,380 | 0% | 69.65 | 160,51 | .635 | 227,341,096 | 84,970,461 | .142.370.635 | |
| | | PCs Total | 1.395.337 | 1.395.337 | 8% | 210.12 | 115,16 | .50% | 304,985,938 | 152,621,367 | .152.364.578 | |
| | | рэ Еиз | 1,249 | 1,249 | 2% | 627,09 | 646,96 | 3% | 783.320 | 806.871 | 23.551 | |
| | | Eura 1 | 367 | 367 | 2% | 861.05 | 297.39 | 45% | 305,969 | 186,020 | -200,950 | 4 |
| | | Euro 2 | 1.383 | 1.383 | 25 | 264.75 | 184,41 | -30% | 368.848 | | -111.531 | 3 |
| | | | 1,383 | 1.095 | 9% | 82.47 | 90.63 | 10% | | 256.917 | 6.994 | |
| | Gaseline | Euro 3 | | | | | | | 70.631 | 77.625 | | |
| | | Euro 4 | 2.400 | 2.400 | 9% | 36,32 | 44,50 | 24% | 87.987 | 188.679 | 20.772 | - 3 |
| | | Euro S | 49 | 49 | 9% | 15,34 | 44,90 | 193% | TSO | 2.210 | 1.468 | 11 |
| . HALLA | | Eura 6 | 0 | 0 | 9% | | | 0% | | 0 | | |
| Light Duty | | Gasoline total | 6.125 | 6.105 | 8% | 255,87 | 214,75 | -16% | 1,618,432 | 1.358.328 | -260.104 | |
| Vehicles | | ha-Ena | 4.876 | 4,876 | 9% | 425.99 | 306,79 | -29% | 2.077.142 | 1.495.903 | -681.239 | - 4 |
| (LOVA) | | Ears 1 | 5.989 | 5.989 | 8% | 395.59 | 215.24 | -45% | 2.369.098 | 1.299,030 | -1.080.069 | 4 |
| (county) | | Euro 2 | 13,126 | 13,126 | 8% | 336,76 | 193,10 | -43% | 4.420.360 | 2.534.731 | -1.885.629 | - 4 |
| | | Euro 3 | 33.249 | 33,249 | 0% | 53/1.01 | 150.58 | -72% | 17.685.883 | 5.085,750 | -12.649.123 | - 4 |
| | Diesel Oil | Euro 4 | 54,581 | 54.581 | 0% | 491.42 | 80.00 | -82% | 26,821,836 | 4.540.722 | -21.501.114 | 4 |
| | | Euro S | 1,629 | 1,629 | 9% | 427.50 | 80.00 | -79% | 696.296 | 164.434 | -651,772 | 4 |
| | | Euro 6 | 0 | 0 | 8% | 161.73 | 99.69 | -42% | 7 | 4 | -3 | 4 |
| | | Diesel oil tutal | 113.450 | 113,450 | 65 | 475.34 | 134,96 | -72% | 54.040.533 | 15,311,584 | -38.728.949 | |
| | | LDVs Total | 119,775 | 119,775 | 8% | 464,70 | 139,18 | -70% | 55,658,966 | 16,649,913 | -38.989.053 | |
| | | | 3.382 | 3.382 | 9% | 1086.25 | 1029,78 | -8% | 3,674,087 | 3.452.644 | -221.423 | _ |
| | | pre-Euro | | | | | | | | | | |
| | | Euro I | 2.826 | 2.826 | 9% | 749,41 | 752,14 | 0% | 2.117.871 | 2.125.585 | 7.723 | |
| LA3bii. | | Euro I | 10.152 | 10.152 | 0% | 801,86 | 643,47 | -20% | 8.140.119 | 6.532.213 | -1.607.906 | 4 |
| leavy Duty | Diesel Oil | Euro II | 15.090 | 15.090 | 9% | 630,22 | 457,25 | -20% | 10.066.776 | T.289.299 | -2.797.967 | 4 |
| Vehicles | Design on | Ears IV | 5.461 | 5.461 | 9% | 448,63 | 361,86 | -22% | 2.450.016 | 1.921.527 | -629.409 | 4 |
| Buses | | Ears V | 10.326 | 10.326 | 9% | 337,28 | 182,30 | -46% | 3.482.417 | 1.982.544 | -1.999.873 | -4 |
| | | Eara VI | 0 | 0 | 8% | | | 0% | t . | 0 | | |
| | | Buses Total | 48,044 | 48,044 | 8% | 623,00 | 482,55 | -27% | 29.931,296 | 23,183,732 | -6.242.534 | - 4 |
| | | pre-Euro | 10.185 | 10,185 | 9% | 1040.16 | 787,37 | -25% | 10.510.623 | T.754.138 | -2.758.485 | - |
| | | Eart | 5,677 | 5,677 | 68 | 750.50 | 575.55 | -23% | 4.261.383 | 3.257.601 | -993.792 | - |
| LA3bH- | | Euro I | 38,588 | 38,588 | 95 | 817.62 | 524,79 | -30% | 31.525.526 | 20.234.619 | -11,290,507 | - 3 |
| Seavy Duty | | Ears II | 150.903 | 158,933 | 05 | 636.20 | 374.48 | 41% | 101.126.192 | 59.517.271 | -41,608,921 | |
| Vehicle: | Diesel Oil | Ears N | 69.535 | 69.636 | 9% | 390.94 | 290,02 | -36% | 27.183.067 | 20.166.636 | -7.817.232 | - 1 |
| Trucks & | | Ears V | 283.934 | 283.934 | 2% | 276,62 | 161,86 | 49% | 79.540.643 | 43.116.897 | -06,404,746 | 3 |
| Lorries | | | 281.904 | 280,904 | 2% | 219,92 | 191,86 | 0% | | 43.119.887 | 109.424.748 | - |
| | | Ears VI | | | | **** | | | | | | |
| | | Trucks Total | 566,741 | 566,741 | 0% | 446,67 | 271,83 | -39% | 253,148,243 | 154,056,160 | -99.092.083 | - |
| | | pre-Euro | 7.973 | 7.973 | 9% | 122,00 | 149,16 | 22% | 972.721 | 1.189.303 | 216.582 | - 1 |
| LA3ble - | | Euro 1 | 5.231 | 5.231 | 9% | 923,77 | 165,74 | 34% | 647.479 | 867.039 | 219.558 | |
| Motorised | | Euro 2 | 3.587 | 3.587 | 9% | 941,96 | 194,21 | 30% | 586.352 | 686.681 | 190.309 | |
| Two | Gaspine | Ears 3 | 2.900 | 2.900 | 9% | 39,11 | 194,21 | 397% | 116,190 | 567.002 | 452.834 | 31 |
| Wheelers | | Euro d | 0 | 0 | 9% | | | 0% | 8 | 0 | | |
| (MWW) | | Earl 6 | 0 | 0 | 8% | | | 0% | | 0 | | |
| | | M2Ws Total | 19,712 | 19,712 | 8% | 113,68 | 168,43 | 48% | 2.240,749 | 3.320.034 | 1.079.285 | |
| | | | | | | | | | | | | |

| | | | | Activity Date | | | ed Emission | | | NO, Emi | | |
|------------------------|---------------|------------------|-----------|---------------|------------|---------|-------------|------------|-------------|-------------|--------------|-----------|
| FR Code | Fuel | | current | | difference | current | adjusted | difference | Current | adjusted | adjustment | differenc |
| | | | in [| | in [N] | | kg/TJ] | in [5] | | in [kg] | | in [5] |
| | | ребиз | 13.063 | 13.063 | 9% | 890,06 | 634,69 | -10% | 7.729.236 | 6.979.436 | -748.801 | -1 |
| | | Ears 1 | 61,979 | 61,979 | 9% | 347,86 | 240,16 | -31% | 21,560,430 | 14.884.961 | -6.675.479 | -9 |
| | | Ews 2 | 87,083 | 87,083 | 8% | 179.38 | 136,68 | -24% | 15.620.983 | 11.883,792 | -3.727.191 | -3 |
| | Gassine | Euro 3 | 124,330 | 124,330 | 8% | 81,64 | 71,52 | 16% | 7.663.891 | 8.891.671 | 1.227.780 | 1 |
| | Canana | Euro 4 | 442,185 | 442,185 | 626 | 43,84 | 43,68 | 0% | 19.384.914 | 19.316.439 | -68.4T6 | |
| | | Euro 5 | 85.057 | 65.057 | 0% | 18,58 | 43,68 | 135% | 1.227.381 | 2.885.636 | 1.658.255 | 13 |
| | | Euro 6 | 1 | 1 | 0% | 25,00 | 43,68 | 60% | 17 | 26 | 11 | 6 |
| 1A3b1. | | Gasoline total | 754,680 | 794,688 | 0% | 92,09 | 81,61 | .215 | 73,185,651 | 64.851.951 | .8.333.900 | |
| assenger | | ребиз | 1.711 | 1.711 | 9% | 310,90 | 264,96 | -15% | 631,963 | 453.197 | -78.606 | -1 |
| Cars | | Ews 1 | 8.426 | 8.426 | 8% | 297.32 | 295,86 | -11% | 2,605,115 | 2.239.997 | -265.119 | - 4 |
| | | Ews 2 | 42.514 | 42.514 | 8% | 407.03 | 219.27 | -46% | 17.384.549 | 9.321,916 | -7.982 E34 | 4 |
| | Princet Park | Euro 3 | 121,429 | 121,429 | 8% | 555.36 | 178,55 | -88% | 67,437,053 | 21.681.366 | 45.755.687 | -4 |
| | Diesel Oil | Euro 4 | 284.943 | 264.943 | 68 | 388.08 | 143,46 | -63% | 102,817,801 | 38.009.755 | -54.808.846 | -8 |
| | | Euro 5 | 113,847 | 913,847 | 0% | 435.12 | 143.46 | -67% | 49.536.968 | 16.332.974 | -33 203 994 | -4 |
| | | Euro 6 | 685 | 695 | 9% | 258.59 | 143.46 | -45% | 180,582 | 99.754 | -00.748 | 4 |
| | | Diesel oil tutal | 553,564 | 553,564 | 05 | 434.12 | 159.32 | .63% | 240,313,791 | 88,138,959 | .152.174.832 | Á |
| | | PCs Total | 1,349,252 | 1,348,252 | 65 | 212.52 | 113,47 | .51% | 313,499,642 | 152,990,910 | .160.508.732 | |
| | | pro-Euro | 1.084 | 1.084 | 2% | 629.26 | 645.95 | 3% | 682.274 | 710.373 | 18.099 | |
| | | Eura 1 | 283 | 283 | 2% | 858,74 | 384,47 | 45% | 243.299 | 86,158 | -157,132 | 4 |
| | | Euro 2 | 1.184 | 1.184 | 2% | 268.66 | 191.66 | -28% | 310.529 | 223,189 | -87 340 | - |
| | | Euro 3 | TES | TES | 25 | 85.97 | 95.39 | 11% | 67.320 | 74.792 | 7.381 | |
| | Gaseline | Euro 4 | 2.562 | 2.562 | 15 | 37.38 | 46.51 | 24% | 95,795 | 119.162 | 23.376 | |
| | | Euro S | 201 | 241 | 95 | 16.13 | 46.51 | 190% | 3.082 | 11.190 | 7.308 | - 11 |
| | | Eura 6 | 0 | 0 | 25 | 16.33 | 46.61 | 283% | 1 | 3 | 2 | 21 |
| Albii. | | Gasoline total | 6.118 | 6.118 | 65 | 229.35 | 198,57 | .13% | 1,460,081 | 1,214,776 | .188.305 | |
| ight Duty | | | 3,995 | 3,995 | 9% | 425.09 | 306,79 | -29% | 1,698,290 | 1,225,602 | 472.598 | |
| Vehicles | | po Euro | 4.787 | 4.787 | 2% | | 215.24 | -40% | | 1.030.425 | | - 4 |
| (LOV4) | | Ears 1 | | | | 395,71 | | | 1.894.390 | | -863.525 | |
| | | Euro 2 | 10.818 | 10.818 | 9% | 336,50 | 193,29 | -43% | 3.644.582 | 2.091.063 | -1.553.530 | 4 |
| | Diesel Oil | Euro 3 | 28.876 | 26.676 | 9% | 541,53 | 150,54 | -72% | 15.637.249 | 4.346.870 | -11.290.379 | |
| | | Euro 4 | 60.832 | 60.632 | 9% | 490,82 | 89,26 | -82% | 30.039.914 | 5.429.811 | -24.618.104 | - 1 |
| | | Euro S | 6.689 | 6.609 | 9% | 440,05 | 89,26 | -80% | 2.930.190 | 534.364 | -2.336.836 | -1 |
| | | Ears 6 | 0 | | 9% | 166,21 | 89,26 | -43% | 14 | | | -4 |
| | | Diesel oil tutal | 115.967 | 115.967 | 8% | 481,55 | 126,92 | -74% | 55.844.518 | 14,718,142 | 41.126.376 | - |
| | | LDVs Total | 122,005 | 122,085 | 8% | 468,52 | 130,61 | -72% | 57.247.599 | 15.902.918 | -41.314.681 | |
| | | pre-Euro | 2.620 | 2.620 | 9% | 1082,69 | 1019,76 | -8% | 2.836.189 | 2.671.331 | -164.718 | |
| | | Eurol | 2.258 | 2.258 | 9% | 752,91 | 751,40 | 0% | 1.689.787 | 1.686.297 | -3.410 | |
| Albii. | | Eart I | 9.074 | 9.074 | 9% | 804,17 | 643,36 | -20% | 7.297.125 | 5.837.959 | -1.459.166 | 4 |
| eavy Duty | Diesel Oil | Ears II | 14.007 | 14.007 | 9% | 633,16 | 457,38 | -20% | 9.425.890 | 6.009.064 | -2.616.827 | 4 |
| Vehicles | | Ears IV | 6.131 | 6.131 | 9% | 448,00 | 361,81 | -02% | 2.363.330 | 1.005.274 | -498 864 | 4 |
| Buses | | Eura V | 13,396 | 13,396 | 9% | 336,60 | 182,62 | -46% | 4,689,062 | 2.446.399 | -2.062.663 | 4 |
| | | Ewe VI | 0 | 0 | 9% | | | 0% | 0 | 0 | | |
| | | Buses Total | 47,365 | 47,365 | 8% | 592,65 | 448,99 | -24% | 28.071.221 | 21.296.323 | -6.804.898 | - 4 |
| | | pre-Euro | 8.044 | 8.044 | 9% | 1008,67 | 783,88 | -26% | 8.355.423 | 6.144.903 | -2.210.491 | - 4 |
| | | Eurol | 4.384 | 4.384 | 0% | 750,96 | 574,04 | -23% | 3.288.422 | 2.516.377 | -772.844 | 4 |
| A3.6 H - | | Eart I | 29.277 | 29.277 | 0% | 817,97 | 520,31 | -36% | 23.947.723 | 15.233.223 | -8.714.429 | - 4 |
| leavy Duty Vehicle: | Private (0.0) | Ears II | 121.581 | 121.581 | 0% | 635,56 | 372,68 | -81% | 77.271.520 | 45.312.437 | -31.959.894 | 4 |
| Trucks & | Diesel Oil | Ears IV | 98.430 | 98.430 | 9% | 390,26 | 289,48 | -26% | 22.977.764 | 16,989,686 | -6.068.019 | 4 |
| Lorries | | Eura V | 342,176 | 342,176 | 8% | 279,30 | 162,00 | -46% | 95,589,479 | 52,019,687 | -43.549.793 | - |
| Lorina | | Ewa VI | 0 | 0 | 2% | | | 0% | 0 | 0 | | |
| | | Trucks Total | 563,891 | 563,891 | 8% | 410.38 | 244,97 | -40% | 231,410,271 | 138.136.342 | -83.273.529 | - |
| | | pre-Euro | 7.389 | 7.389 | 8% | 122.96 | 150,24 | 22% | 968,588 | 1,110,178 | 201.580 | - 1 |
| | | Euro 1 | 4.885 | 4.885 | 2% | 124.72 | 165.25 | 35% | 589.299 | 888.547 | 209.248 | |
| Motorised | | Euro 2 | 3.544 | 3.546 | 95 | 137.85 | 194,58 | 41% | 488.582 | 689.683 | 201.851 | |
| Two | Gaudine | Eura 3 | 3,580 | 3,590 | 85 | 39.59 | 194,58 | 392% | 140.553 | 680,634 | 550 300 | 31 |
| Wheelers | | Earl 4 | 0 | 0 | 9% | | | 0% | | 0 | | |
| (MQWs) | | Earl 6 | 0 | 0 | 2% | | | 0% | | 0 | | |
| | | M2Ws Total | 19,289 | 19,289 | 674 | 110.79 | 171,04 | 545 | 2.137.002 | 3,299,162 | 1.162.168 | _ |
| | | | | | | | | | | | | |

adjustment_de-a 7/12

| | | | | Activity Date | | | ed Emission | | | NO ₃ Emi | | |
|------------|------------|------------------|-----------|---------------|------------|---------|------------------|--------------|-------------|---------------------|--------------|----------|
| NFR Code | Fuel | | current | adjusted | difference | current | adjusted | difference | Current | adjusted | adjustment | differen |
| | | | in (| I.I | in [N] | | [LT/gr | in [5] | | in [kg] | | in [%] |
| | | ребиз | 11,661 | 11,661 | 9% | 607,72 | 636,39 | -12% | 7.036.041 | 6.189.786 | -836.256 | - |
| | | Ears 1 | 47,487 | 47,467 | 9% | 349,66 | 241,02 | -31% | 16,671,746 | 11,426,129 | -6.145.617 | |
| | | Eura 2 | 72,761 | 72,761 | 0% | 184,27 | 137,92 | -25% | 13,487,749 | 10.035,380 | -3.372.369 | 4 |
| | | Euro 3 | 108.443 | 108,443 | 9% | 63.89 | 72.62 | 14% | 6.927.963 | 7.875.172 | 547.265 | |
| | Gassine | Euro 4 | 488,541 | 408.541 | 9% | 45.39 | 45.13 | -1% | 18,541,861 | 18,436,716 | -105.145 | |
| | | Euro 5 | 101.901 | 101,961 | 0% | 18.61 | 45.13 | 143% | 1.897.386 | 4.681.311 | 2.703.954 | 1 |
| | | Euro 6 | 282 | 282 | 95 | 25.00 | 45.13 | 74% | 7.338 | 12,736 | 5.399 | |
| 14301. | | Gasoline total | 750,957 | 750.957 | 0% | 85,73 | 70,00 | .95 | 64.379.984 | 50,577,329 | 5.802.765 | |
| Passenger | | ребиз | 1.487 | 1.487 | 2% | 311.98 | 264.96 | -10% | 463.963 | 393,972 | 49.921 | - |
| Cars | | Ears 1 | 6.660 | 6.660 | 2% | 297,79 | 296,44 | -11% | 1,980,364 | 1.771.797 | -208.517 | |
| | | Euro 2 | 33.967 | 33.967 | 2% | 406.62 | 219.27 | 45% | 13.807.432 | T.445.646 | -6.361.787 | |
| | | | | | 274 | | | | | | | |
| | Diesel Oil | Earn 3 | 163,539 | 103.539 | | 564,02 | 178,63 | -65% | 58.398.037 | 18.454.837 | -39.903.200 | - |
| | | Euro 4 | 234.943 | 234.943 | 9% | 390,41 | 145,46 | -62% | 91,724,198 | 34.485.997 | -57.315.201 | - |
| | | Euro 5 | 173.112 | 173,112 | 0% | 434,89 | 145,46 | -60% | 75.284.364 | 25.383.375 | 49 530 590 | 4 |
| | | Euro 6 | 1.557 | 1.557 | 9% | 259,84 | 146,46 | -81% | 484.664 | 228.086 | -176.578 | - |
| | | Diesel oil tutal | 555,245 | 555,245 | 0% | 435,96 | 150,66 | .665 | 242.062.982 | 80.096.699 | .153.966.203 | |
| | | PCs Total | 1.306.202 | 1,306,262 | 6% | 234,61 | 112,29 | -52% | 306.442.896 | 146,673,927 | -159,768,968 | |
| | | pa-Eura | 962 | 962 | 9% | 632,00 | 646,96 | 2% | 667,739 | 621,150 | 13.411 | |
| | | Ears 1 | 232 | 232 | 8% | 863.24 | 383.22 | -85% | 199.865 | 70.295 | -129.661 | |
| | | Euro 2 | 989 | 989 | 9% | 271.16 | 195,74 | -28% | 268,194 | 193,598 | -T4.556 | |
| | | Euro 3 | 835 | 835 | 0% | 89.38 | 98.33 | 10% | 74.623 | 82,092 | 7.453 | |
| | Gaseline | Euro 4 | 2.030 | 2.030 | 0% | 38.49 | 47.58 | 24% | 78.155 | 96,681 | 18.445 | |
| | | Euro S | 610 | 610 | 9% | 16.30 | 47.58 | 192% | 9.941 | 29.011 | 19.003 | 1 |
| | | Euro 6 | 0 | 0 | 9% | 15.37 | 47.68 | 210% | 2 | 6 | 4 | 2 |
| Albii. | | Gasoline total | 5.657 | 5,657 | 65 | 218.90 | 190,15 | .10% | 1,238,520 | 1.092.662 | .165.859 | - |
| Light Duty | | | 3,291 | 3.291 | 2% | 434.46 | 306,79 | -20% | 1.368.754 | 982.093 | -376.661 | _ |
| Vehicles | | ha-Ena | 3.666 | 3.696 | 2% | 395.34 | 215.24 | 45% | 1,445,580 | 787.034 | -858.526 | |
| (LOVA) | | Ears 1 | | | | | | | | | | |
| | | Euro 2 | 8.479 | 8.479 | 9% | 336,40 | 193,39 | -43% | 2.882.325 | 1.639.772 | -1.212.553 | |
| | Diesel Oil | Euro 3 | 23.785 | 23.765 | 9% | 550,53 | 150,44 | -73% | 13.050.281 | 3.586.082 | -9.454.129 | |
| | | Euro 4 | 59.485 | 59.485 | 9% | 494,22 | 89,85 | -82% | 29.358.676 | 5.337.395 | -24.021.403 | |
| | | Euro S | 15.964 | 15.964 | 9% | 442,70 | 89,85 | -80% | 7.040.461 | 1.420.986 | -6.611.955 | |
| | | Euro 6 | 1 | - 1 | 9% | 191,94 | 89,86 | -41% | 122 | 72 | -68 | |
| | | Diesel oil total | 114,350 | 114,350 | 6% | 481,91 | 120,17 | -79% | 55,106,382 | 13,741,354 | -41.365.028 | |
| | | LDVs Total | 120,088 | 120,008 | 8% | 469,51 | 123,61 | -74% | 96.344.963 | 14.834.016 | -41.510.887 | |
| | | pre-Euro | 1,326 | 1.326 | 9% | 1063.46 | 1019.45 | 4% | 1,410,646 | 1.362.263 | -58.382 | |
| | | Eurol | 1,248 | 1.248 | 8% | 727.34 | 751,15 | 3% | 907.476 | 937.184 | 29.708 | |
| A3bii. | | Eart I | 7,768 | 7,768 | 0% | 763.45 | 643.34 | -10% | 6.085.891 | 4.987.478 | -1.058.413 | |
| many Duty | | Euro II | 16.403 | 16.483 | 0% | 629.94 | 457,51 | -21% | 9.073.197 | 6.589.744 | -2.403.453 | |
| Vehicles | Diesel Oil | Ears IV | 6.301 | 6.301 | 9% | 453.50 | 361,66 | -23% | 2.442.179 | 1,076,777 | -966,402 | |
| Buses | | Ears V | 20.752 | 20.792 | 8% | 347.94 | 182,99 | -47% | 7.219.663 | 3.797.467 | -3.421.096 | |
| | | Ears VI | 73 | 23 | 2% | 64.62 | 182.99 | 236% | 3.961 | 13.296 | 9.334 | 2 |
| | | Buses Total | 50.902 | 50,962 | 674 | 510,22 | 384,33 | -28% | 27.141.913 | 19,543,298 | 2.578.704 | - |
| | | pro-Euro | 6.922 | 6,922 | 9% | 1036.95 | 758.82 | -21% | 7.177.543 | 5,252,345 | -1.525.198 | |
| | | | | | 2% 2% | | 798,82 570,57 | -21% -24% | | | | |
| A3bH- | | Eart | 3.630 | 3.630 | | 749,70 | | | 2.721.326 | 2.071.111 | -650.215 | |
| eavy Duty | | Ears I | 23.577 | 25.577 | 9% | 818,27 | 595,43 | -31% | 19.292.253 | 12.175.855 | -7.116.398 | - |
| Vehicle: | Diesel Oil | Ears II | 96.726 | 96.736 | 9% | 634,66 | 370,21 | -42% | 61.367.137 | 35.080.665 | -25.578.472 | |
| Trucks & | | Ears IV | 90.690 | 90.690 | 9% | 396,60 | 290,44 | -21% | 19.992.680 | 14.580.077 | -6.411.723 | 4 |
| Lorries | | Ears V | 405.981 | 405,981 | 9% | 281,24 | 162,32 | -46% | 114,149,955 | 61.826.677 | -62:324.278 | |
| | | Ewe VI | 2.300 | 2.300 | 9% | | | 0% | 108.467 | 360.323 | 241.856 | 2 |
| | | Trucks Total | 589,585 | 589,585 | 8% | 381,33 | 224,00 | -41% | 224,829,180 | 132,064,753 | -52,264,428 | |
| | | pre-Euro | 6,790 | 6.790 | 9% | 122,76 | 151,00 | 23% | 822.538 | 1.011.920 | 189.381 | |
| A3bir- | | Ears 1 | 4.305 | 4.305 | 9% | 124,61 | 171,30 | 38% | 536,615 | 738,050 | 201.435 | |
| Motorised | | Euro 2 | 3.267 | 3.267 | 9% | 136.22 | 194.95 | 43% | 445.0ET | 636.853 | 191.846 | |
| Teve | Gaspine | Euro 3 | 3.994 | 3.994 | 9% | 39.66 | 194.95 | 392% | 150.306 | 770.616 | 620.230 | 3 |
| Wheelers | | Eura 4 | 0 | 0 | 9% | | | 0% | | 0 | | |
| (M2Ws) | | Eura 6 | 0 | 0 | 2% | | | 0% | | 0 | | |
| | | M2Ws Total | 18,268 | 18,268 | 8% | 107,43 | 173,28 | 61% | 1,962,546 | 3.165.439 | 1,202,893 | |
| | | | | | | | | | | | | |

| | | | | ctivity Dat | | lar of the | ed Emission | Factor | | NO, Emi | enlane. | |
|------------------------|-------------|-------------------|--------------------|-------------|------------|-------------------|------------------|--------------|-------------------------|-------------------------|--------------------------|----------|
| NFR Code | Fuel | | current | adjusted | difference | CURTERS | adjusted | difference | current | adjusted | adjustment | differen |
| | | | in [7 | | in [5] | | [LT/gr | in [5] | | in [kg] | | in [% |
| | | hegas | 11.490 | 11,490 | 9% | 610,22 | 619,36 | -10% | 7.011.641 | 6.967.452 | -1.644.009 | |
| | | Ears 1 | 37,743 | 37,743 | 9% | 363,78 | 241,88 | -32% | 13.362.986 | 9.129.405 | 4.223.501 | |
| | | Euro 2 | 62,600 | 62,600 | 9% | 109.93 | 139.33 | -21% | 11,889,922 | 8.722.244 | -3.167.678 | |
| | Gassline | Euro 3 | 97,792 | 97,792 | 9% | 66,38 | 73,19 | 10% | 6.491.618 | T.156.920 | 665.303 | |
| | | Euro 4 | 397.911 138.863 | 397.911 | 0% 0% | 47,22 18,60 | 46,52 46,52 | 150% | 18.790.345 2.583.150 | 15.589.937 6.459.681 | -258.407 3.876.451 | 1 |
| | | Euro S Euro G | 2.714 | 2.794 | 95 | 25,99 | 46,52 | 79% | 70.536 | 126.237 | 55.711 | 1 |
| 14301. | | Gasoline total | 749,114 | 749,114 | 05 | 80,35 | 74,85 | 35 | 60.190.067 | 56,071,797 | 4.118.211 | |
| Passenger | | ребиз | 1.389 | 1.389 | 2% | 312.26 | 264,96 | -10% | 433.981 | 369.139 | 46.742 | - |
| Cars | | Ears 1 | 6.625 | 5.625 | 2% | 298.42 | 296,79 | -11% | 1,678,472 | 1,580,588 | -177.884 | |
| | | Euro 2 | 28.437 | 28.437 | 2% | 406.64 | 219.91 | 45% | 11.583.522 | 6.253.531 | -6.309.991 | |
| | | Euro 3 | 92,795 | 92,795 | 9% | 574.33 | 178.67 | 49% | 53,294,996 | 16.579.373 | -36.715.583 | |
| | Diesel Oil | Euro 4 | 222.583 | 222.583 | 9% | 390.55 | 149.27 | -62% | 87.558.471 | 33.225.566 | -54.372.905 | |
| | | Euro 5 | 233,796 | 233,766 | 0% | 435.42 | 149.27 | -85% | 101,787,275 | 34.884.758 | -66 892 507 | |
| | | Euro 6 | 4.536 | 4.536 | 9% | 258.53 | 149.27 | -42% | 1.177.151 | 677.046 | -608.106 | |
| | | Diesel oil tutal | 589,131 | 589,131 | 0% | 437,14 | 150,71 | .64% | 257,533,720 | 93,499,010 | .164.834.718 | |
| | | PCs Total | 1,338,245 | 1.338.245 | 65 | 217.42 | 111,37 | .53% | 317,723,735 | 149,570,896 | .168.152.828 | |
| | | pa Eura | 897 | 997 | 2% | 630.81 | 645,95 | 2% | 568.320 | 679.293 | 10.894 | |
| | | Ears 1 | 194 | 194 | 0% | 863.50 | 396.27 | -85% | 167,261 | 59,326 | -107.535 | |
| | | Euro 2 | 836 | 836 | 9% | 214.42 | 291.18 | -21% | 229.520 | 168.295 | -61.258 | - |
| | | Euro 3 | T84 | T84 | 0% | 52,66 | 101,70 | 10% | 72,681 | 79.780 | 7.009 | |
| | Gaseline | Ears 4 | 1.899 | 1.899 | 0% | 40,70 | 45,89 | 20% | 77.284 | 92.833 | 15.549 | |
| | | Euro S | 966 | 966 | 9% | 16,67 | 40,09 | 193% | 16.107 | 47.240 | 31.161 | 1 |
| | | Ears 6 | 1 | - 1 | 9% | 17,60 | 49,89 | 179% | 36 | 72 | 46 | 1 |
| Albii. | | Gosoline total | 5,578 | 5,578 | 8% | 202,80 | 184,07 | -9% | 1,131,269 | 1.026,727 | -104.492 | |
| Light Duty Vehicles | | ребиз | 2.754 | 2.754 | 9% | 434,37 | 306,79 | -29% | 1,168,757 | 844.928 | -323.828 | - 4 |
| (LOVA) | | Ears 1 | 2.948 | 2.948 | 9% | 395,75 | 215,25 | -45% | 1,166,782 | 634.586 | -632.136 | |
| | | Euro 2 | 6.982 | 6.982 | 9% | 336,02 | 193,35 | -42% | 2.345.147 | 1.380.014 | -896.133 | |
| | Diesel Oil | Euro 3 | 20.421 | 20.421 | 0% | 568,12 | 150,38 | -73% | 11.437.995 | 3.070.913 | -8.367.882 | - |
| | Present Con | Ears 4 | 55.667 | 55.667 | 9% | 497,72 | 90,46 | -82% | 27.775.440 | 5.048.416 | -22.728.824 | - |
| | | Euro S | 29.024 | 29.024 | 9% | 441,97 | 90,46 | -80% | 13.181.325 | 2.687.964 | -10.403.361 | - |
| | | Ears 6 | 41 | 41 | 9% | 161,28 | 90,46 | -40% | 6.160 | 3,688 | -2.479 | |
| | | Diesel oil tutal | 118,777 | 118,777 | 8% | 499,60 | 114,90 | -76% | 57.003.533 | 13,650,488 | 43.433.845 | |
| | | LDVs Total | 124,354 | 124,354 | 8% | 468,14 | 118,00 | -79% | 58.214.742 | 14,677,215 | 43.537.527 | |
| | | pre-Euro | 1,172 | 1.172 | 9% | 1066,08 | 1019,23 | 4% | 1.249.028 | 1.194.143 | -54.885 | |
| | | Euro I | 1.054 | 1.084 | 9% | 727,68 | 750,99 | 3% | 766,620 | 791.181 | 24.551 | |
| A3bii | | Euro I | 6.884 | 6.884 | 9% | 764,07 | 643,48 | -10% | 5.334.988 | 4.376.271 | -856 E37 | |
| leavy Duty | Diesel Oil | Euro II | 13.107 | 13.107 | 9% | 630,43 | 457,65 | -21% | 8.262.680 | 5.988.226 | -2.364.575 | 4 |
| Vohicle: Bases | | Ears IV | 4.946 | 4.946 | 9% | 468,55 | 361,71 | -34% | 2.278.061 | 1.739.796 | -638.354 | 4 |
| Culer | | Ears V | 34.096 | 24,096 | 9% | 368,00 | 183,46 | -49% | 8.436.683 | 4.420.743 | -4.014.761 | |
| | | Ewa VI | 637 | 637 | 9% | 44,76 | 183,46 | 310% | 24,047 | 98.572 | 74.525 | 3 |
| | | Buses Total | 91,716 5,863 | 51,796 | 0% 0% | 509,54 1035,72 | 360,06 737,35 | -29% -29% | 26,350,969 | 18.620.843 4.322.868 | -7.730.126 -1.749.303 | - |
| | | pe-Care Ears I | 2.985 | 2,985 | 9% | 749.27 | 568.27 | -29% -24% | 6.072.170 2.176.846 | 1.650.969 | -1.748.303 -525.877 | |
| A3bH- | | Earl I | 15.444 | 15.444 | 0% | 818.57 | 513.46 | -31% | 15.089.861 | 9.469.975 | -5.619.806 | |
| leavy Duty | | Eura II | 75.130 | 75.130 | 95 | 630.53 | 367,33 | 42% | 47.587.440 | 27.587.760 | -19.999.600 | |
| Vehicle: | Diesel Oil | Eura IV | 42.791 | 42.791 | 9% | 396.90 | 287,27 | -37% | 16.936.007 | 12.289.770 | -4 647 E37 | |
| Trucks & | | Eas V | 436,999 | 436,999 | 2% | 291.70 | 152.65 | 40% | 123 101 334 | 66.786.496 | -66 394 B27 | |
| Lorries | | Eura VI | 18.020 | 18.020 | 2% | 60.67 | 152,65 | 201% | 913.082 | 2,750,630 | 1.837.549 | |
| | | Trucks Total | 600,139 | 600,139 | 0% | 353.06 | 297,90 | 41% | 211,887,531 | 124,788,469 | -87,099,062 | |
| | | pročen | 6.382 | 6.352 | 9% | 123.07 | 151,79 | 23% | 781.736 | 964,179 | 182.443 | |
| | | Euro 1 | 4.013 | 4.013 | 9% | 125,11 | 173,15 | 38% | 582.073 | 684.880 | 192.807 | |
| Motorised | | Euro 2 | 3.382 | 3.362 | 95 | 132.24 | 195.58 | 40% | 436,668 | 645.884 | 209.136 | |
| Two | Gaspline | Ears 3 | 4.562 | 4.562 | 9% | 39,01 | 195,58 | 391% | 181.610 | 882.176 | 710.565 | 3 |
| Wheelers | | Earl 4 | 0" | 0 | 2% | 20,01 | T Mary and | 0% | | 0 | 0 | |
| (MQWN) | | Earl 6 | 0" | ó | 9% | | | 016 | | 0 | | |
| | | M2Ws Total | 18,229 | 18,229 | 8% | 104.34 | 175,38 | 68% | 1,962,088 | 3.197.008 | 1,294,951 | |
| | | | | | | | | | | | | |

adjustment_de-a 8/12

| | | | | Activity Date | | | ed Emission | | | NO ₃ Emi | | |
|------------|------------|------------------|-----------|---------------|------------|---------|-------------|--------------|-------------|---------------------|--------------|----------|
| MFR Code | Fuel | | current | adjusted | difference | current | adjusted | difference | Current | adjusted | adjustment | differen |
| | | | in [| I.I | in [N] | in p | kg/TJ[] | in [5] | | in [kg] | | in [5] |
| | | ребиз | 11.647 | 11,647 | 9% | 612,37 | 644,11 | -11% | 7.132,689 | 6.307.464 | -796.844 | -4 |
| | | Ears 1 | 30,667 | 30.667 | 8% | 368,77 | 243,90 | -32% | 11,002,246 | 7,480,541 | -3.521.706 | - 4 |
| | | Eura 2 | 53,486 | 53,486 | 0% | 196,58 | 140,31 | -29% | 10.514.477 | T.584.432 | -3.010.044 | 4 |
| | | Euro 3 | 87,374 | 87,374 | 9% | 69.31 | 73.93 | 7% | 6.055.588 | 6.459.797 | 404.218 | |
| | Gassline | Euro 4 | 387,759 | 387,759 | 9% | 49.15 | 47.80 | -3% | 19,059,585 | 15,535,009 | -523.557 | |
| | | Euro 5 | 171,278 | 171,278 | 0% | 18.59 | 47.80 | 157% | 3.183.292 | 8.187.581 | 5.004.289 | 1 |
| | | Euro 6 | 10.315 | 10.315 | 95 | 25.97 | 4T.80 | 84% | 267.050 | 493,098 | 225.240 | |
| 14301. | | Gasoline total | 752,526 | 752,526 | 0% | 76,03 | 73,09 | .45 | 57,215,533 | 54,990,921 | 2.216.612 | |
| Passenger | | ребиз | 1.341 | 1.341 | 2% | 311.73 | 264.96 | -10% | 417.967 | 366.246 | 40.720 | - |
| Cars | | Ears 1 | 4.992 | 4.992 | 2% | 298.92 | 267.20 | -11% | 1,462,264 | 1.307.043 | 155.161 | |
| | | Euro 2 | 23.934 | 23.934 | 2% | 406,71 | 220.45 | 45% | 9,734,484 | 5,276,480 | 4.458.884 | |
| | | | E2.749 | 82,749 | 25 | 588.53 | 178.81 | 49% | 48.481.830 | 14.796.245 | -33.855.585 | |
| | Diesel Oil | Earn 3 | 211,237 | 211,237 | 25 | 397.27 | 151,77 | -12% -12% | 83.917.680 | 32,059,973 | -51,857,706 | |
| | | Euro 4 | | | | | | | | | | |
| | | Euro 5 | 285.811 | 285.811 | 0% | 436,38 | 151,77 | -65% | 124.721.396 | 43.378.380 | -81.343.896 | |
| | | Euro 6 | 15.081 | 16.001 | 9% | 259,34 | 151,77 | -41% | 4.170.580 | 2.440.686 | -1.729.014 | - |
| | | Diesel oil tutal | 626.045 | 636.045 | 0% | 415,87 | 159,12 | .635 | 272.076.061 | 99,613,892 | .173.262.169 | |
| | | PCs Total | 1,328,521 | 1.378.571 | 6% | 239,44 | 112,15 | -53% | 330.091.584 | 154,612,813 | -175.478.281 | |
| | | ha ∈na | 896 | 896 | 2% | 634,74 | 645,95 | 2% | 568,683 | 678.724 | 10.648 | |
| | | Ews 1 | 173 | 173 | 9% | 868,27 | 389,96 | -64% | 150.074 | 53.575 | -56.459 | |
| | | Euro 2 | T48 | T48 | 9% | 284,73 | 297,11 | -21% | 212.868 | 154,839 | -58.829 | - |
| | | Euro 3 | 771 | 771 | 0% | 98.62 | 105.21 | 7% | 75.982 | 81,070 | 5.078 | |
| | Gaseline | Euro 4 | 1.067 | 1.567 | 0% | 43.47 | 50.15 | 15% | 81.139 | 93,616 | 12.479 | |
| | | Euro S | 1.374 | 1.374 | 9% | 17.91 | 50.15 | 193% | 23.517 | 60.910 | 45.401 | 1 |
| | | Euro 6 | 17 | 17 | 9% | 19.00 | 50.15 | 179% | 312 | 870 | 967 | 1 |
| Albii. | | Gasoline total | 5.845 | 5.845 | 8% | 190.34 | 176,49 | 3% | 1,112,584 | 1.001.612 | .86.572 | |
| Light Duty | | рэ-Еиз | 2,537 | 2,537 | 2% | 429.16 | 306,79 | -21% | 1.065.819 | 778.259 | -297.558 | |
| Vehicles | | Eura 1 | 2.588 | 2.588 | 2% | 390.62 | 215.25 | 45% | 987,136 | 539.808 | -447.328 | |
| (LOVA) | | | | | | | | | | | | |
| | | Euro 2 | 6.007 | 6.007 | 9% | 330,61 | 193,25 | -42% | 1.985.995 | 1.160.869 | -825.126 | |
| | Diesel Oil | Euro 3 | 18.220 | 18.220 | 9% | 571,75 | 150,58 | -74% | 10.417.076 | 2.742.056 | -7.675.020 | - |
| | | Euro 4 | 52.361 | 52.361 | 9% | 499,70 | 91,09 | -82% | 25.164.485 | 4.789.746 | -21.394.748 | |
| | | Euro S | 45.749 | 46.749 | 9% | 428,64 | 91,09 | -79% | 20.496.234 | 4.250.526 | -16.237.709 | |
| | | Euro 6 | 197 | 197 | 9% | 161,18 | 91,09 | -40% | 29.929 | 17.974 | -11.866 | |
| | | Diesel oil total | 128,578 | 128,578 | 6% | 475,56 | 110,96 | -77% | 61,146,575 | 14.267.237 | 46,879,338 | |
| | | LDVs Total | 134.423 | 134,423 | 8% | 463,16 | 113,81 | -79% | 62,259,160 | 15,298,849 | -06.960.311 | |
| | | pro-Euro | 984 | 984 | 9% | 1069.48 | 1019.23 | -8% | 1.052.384 | 1.002.921 | 49.443 | |
| | | Euro I | 837 | 837 | 8% | 729,12 | 750,98 | 3% | 689.232 | 628.359 | 19.127 | |
| A3bii. | | Eart I | 5,586 | 5,586 | 0% | 764.95 | 643.67 | -10% | 4.394.325 | 3,683,441 | -790.857 | |
| many Duty | | Euro II | 11.221 | 11,221 | 0% | 631.20 | 450,38 | -21% | 7.082.748 | 5.143.528 | -1.539.229 | |
| Vehicles | Diesel Oil | Ears M | 4.270 | 4.270 | 9% | 461.10 | 361.79 | -34% | 1,972,610 | 1,584,979 | -467.630 | |
| Buses | | Ears V | 22.042 | 22.042 | 8% | 368,66 | 183,99 | -40% | 7.796.921 | 4.066.632 | -3.671.309 | |
| | | Earl VI | 4.182 | 4.182 | 2% | 42.78 | 183,99 | 330% | 178,913 | 769.476 | 590.563 | |
| | | Buses Total | 49.143 | 49.143 | P% | 468.37 | 339.99 | -27% | 23.017.115 | 16,718,234 | 4.308.881 | |
| | | pro-Euro | 47.782 | 4782 | 9% | 1034.34 | 737.35 | -29% | 4.945.942 | 3,525,898 | -1.429.134 | |
| | | | | 2,285 | 2% 2% | 748.66 | 581.41 | -25% | | | | |
| A3bH- | | Eart | 2.285 | | | | | | 1.650.685 | 1.237.759 | 412.848 | |
| eavy Duty | | Ears I | 13.629 | 13.629 | 9% | 817,90 | 510,38 | -35% | 11.146.889 | 6.965.738 | 4.191.131 | - |
| Vehicle: | Diesel Oil | Euro II | 54.685 | 54.685 | 9% | 610,52 | 364,41 | -42% | 34.589.677 | 19.927.835 | -14.661.841 | |
| Trucks & | | Ears IV | 34.037 | 34.037 | 9% | 396,37 | 286,34 | -20% | 13.491.199 | 9.711.896 | -3.779.262 | 4 |
| Lorries | | Ears V | 389.283 | 369.263 | 9% | 262,92 | 163,06 | -46% | 110,112,792 | 59.569.043 | -60.544.749 | |
| | | Ewa VI | 74.214 | 74.214 | 9% | 60.06 | 153,05 | 189% | 3.937,089 | 11.368.682 | 7.421.413 | 1 |
| | | Trucks Total | 572,754 | 572,754 | 8% | 314,05 | 196,05 | -38% | 129,824,133 | 112,285,582 | -87.588.551 | |
| | | pre-Euro | 6.185 | 6.185 | 9% | 122,65 | 158,04 | 29% | 756,185 | 974.388 | 218.182 | |
| A3bir- | | Euro 1 | 3,837 | 3.837 | 9% | 124.71 | 174,84 | 40% | 478.514 | 670.859 | 192.346 | |
| Motorised | | Euro 2 | 3.365 | 3.365 | 9% | 129.94 | 196,25 | 52% | 433.674 | 680.378 | 226.504 | |
| Teve | Gaspine | Ears 3 | 5.385 | 5.305 | 9% | 39.53 | 196,25 | 396% | 209.722 | 1.041.189 | 831.467 | 3 |
| Wheelers | | Earl 4 | 0 | 0 | 9% | | | 0% | | 0 | | |
| (M2Ws) | | Eura 6 | ő | 0 | 2% | | | 0% | | 0 | | |
| | | M2Ws Total | 18.623 | 18.623 | 8% | 100,59 | 179,24 | 78% | 1.878.294 | 3,346,794 | 1.468.499 | |
| | | | | | | | | | | | | |

| | | | | estivity Dat | | lar-W | ed Emission | Factor 1 | | NO, Emi | an long | |
|------------------------|-------------|--------------------|------------------|------------------|------------|------------------|------------------|--------------|--------------------------|--------------------------|---------------------------|----------|
| MFR Code | Fuel | | current | adjusted | difference | current | adjusted | difference | current | adjusted | adjustment | differen |
| | | | in [] | | in [%] | 620.23 | (LT/gr | in [5] | 7.206.112 | 6.191.962 | -1.014.169 | in [% |
| | | pe-Eura Eura 1 | 11.380 34.112 | 11,380 | 2% | 371.34 | 544,11 245,71 | -14% | 8.963.881 | 6.994.674 | -1.010.109 | |
| | | | 42,925 | 42,925 | 2% | 207,78 | 142,08 | -32% | 8.918.785 | 6.089.069 | -2.819.646 | |
| | | Eura 2 | 72,871 | 72,871 | 2% | 73.85 | 74.74 | 1% | 5.381.351 | 5.446.237 | 64.887 | |
| | Gassline | Ears 3 Ears 4 | 383,474 | 353,474 | 25 | 52,30 | 49.02 | -6% | 18.485.637 | 17.326.221 | -1.159.416 | |
| | | Euro S | 180.783 | 180,783 | 9% | 19.11 | 49.02 | 157% | 3.454.481 | 8.861.456 | 5.406.975 | 1 |
| | | Euro 6 | 29.612 | 29.612 | 9% | 25,70 | 49,02 | 84% | 790.701 | 1.451.493 | 650 793 | 1 |
| 14301. | | Gasoline total | 715,156 | 715.156 | 85 | 74,30 | 71,73 | 45 | 53,190,787 | 51,380,983 | .1.889.805 | |
| Passenger | | рь-Еиз | 1.292 | 1.282 | 2% | 310.32 | 264,96 | -10% | 397.917 | 309.733 | -68.194 | - |
| Cars | | Ears 1 | 4.219 | 4.219 | 2% | 299.14 | 267,84 | -10% | 1261,930 | 1.129.909 | -132 821 | |
| | | Euro 2 | 19.689 | 19.689 | 2% | 407,00 | 220.36 | 40% | 8.013.587 | 4.338,719 | -3.674.788 | |
| | | Euro 3 | 71,044 | 71.044 | 2% | 595.01 | 179.04 | -70% | 42,271,648 | 12,719,962 | -29.551.685 | |
| | Diesel Oil | Euro 4 | 192,410 | 192,410 | 9% | 401.42 | 154.07 | 42% | 77.237.685 | 29,544,450 | 47,593,206 | |
| | | Euro 5 | 384.346 | 364,346 | 0% | 434.67 | 154.07 | 45% | 132,290,453 | 45,880,424 | -85,400,053 | 4 |
| | | Euro 6 | 52.576 | 52.576 | 9% | 258.76 | 154.07 | -41% | 13.657.082 | 0.180.384 | -6.956.778 | - |
| | | Diesel oil tutal | 645,565 | 645,565 | 0% | 496,19 | 159,88 | .62% | 275,130,233 | 183,163,501 | .171.966.730 | |
| | | PCs Total | 1.360.721 | 1,369,721 | 6% | 241.26 | 113,52 | .51% | 339,331,030 | 154,464,484 | .173.856.536 | |
| | | ре-Еиз | 879 | 879 | 2% | 664,37 | 645,96 | -1% | 675.380 | 567.977 | -7.404 | |
| | | Euro 1 | 190 | 150 | 2% | 895.63 | 311,93 | -85% | 134,523 | 46,851 | -87.672 | |
| | | Euro 2 | 629 | 629 | 9% | 298.27 | 212.54 | -29% | 187.533 | 133,879 | -53.854 | - |
| | | Euro 3 | 781 | 701 | 0% | 105.50 | 108.62 | 3% | 73.969 | 76.155 | 2.156 | |
| | Gaseline | Ears 4 | 1.720 | 1.720 | 0% | 47,06 | 51,30 | 9% | 80.958 | 85,245 | 7.290 | |
| | | Euro S | 1.630 | 1.630 | 0% | 10,41 | 51,30 | 179% | 29.012 | 83.086 | 53.274 | 1 |
| | | Ears 6 | 54 | 54 | 9% | 19,71 | 81,30 | 174% | 1.792 | 4.994 | 3.862 | 1 |
| Albii. | | Gosoline total | 5,793 | 5.793 | 8% | 197,12 | 172,80 | -8% | 1.083.927 | 1.000.999 | 49.526 | |
| Light Duty Vehicles | | рэ-Еиз | 2.323 | 2.323 | 9% | 416,01 | 306,79 | -26% | 966,185 | 712.531 | -253.654 | - 4 |
| (LOVA) | | Ears 1 | 2.106 | 2,106 | 9% | 391,47 | 215,25 | -45% | 834.270 | 453.227 | -371.843 | |
| (const) | | Euro 2 | 5.025 | 5.025 | 9% | 324,81 | 193,29 | -40% | 1.632.296 | 971.296 | -650 529 | |
| | Diesel Oil | Euro 3 | 15.701 | 15,701 | 0% | 588,35 | 150,67 | -74% | 2.112.414 | 2.385.713 | -6.746.701 | - |
| | Present Con | Ears 4 | 47.480 | 47.480 | 9% | 501,73 | 91,74 | -82% | 23.782.396 | 4.348.298 | -19.434.098 | - |
| | | Euro S | 62.116 | 62,116 | 9% | 436,13 | 91,78 | -79% | 27.090.214 | 5.680.295 | -21.392.009 | - |
| | | Ears 6 | 636 | 636 | 9% | 164,01 | 91,74 | -40% | 97.798 | 59.230 | -39.629 | |
| | | Diesel oil tutal | 135,306 | 135,306 | 8% | 469,35 | 107,96 | -77% | 63,505,443 | 14,687,490 | 48.897.953 | |
| | | LDVs Total | 141,098 | 141,098 | 8% | 457,76 | 110,62 | -76% | 64,589,370 | 15,688,490 | -48.560.881 | |
| | | pre-Euro | 979 | 979 | 9% | 1070,34 | 1019,23 | -8% | 1.048.312 | 988.256 | -50.058 | |
| | | Euro I | 747 | 747 | 9% | 730,26 | 751,91 | 3% | 545.471 | 561.636 | 16.165 | |
| LA3bii. | | Eart I | 5.211 | 5.211 | 9% | 767,43 | 544,45 | -10% | 4.103.687 | 3.388.684 | -745.863 | |
| leavy Duty | Diesel Oil | Euro II | 11.282 | 11.282 | 9% | 633,00 | 450,67 | -20% | 7.141.732 | 5.174.909 | -1.966 B22 | 4 |
| Vehicles | | Ears IV | 4.586 | 4.586 | 9% | 460,70 | 361,99 | -25% | 2.154.086 | 1.614.177 | -639 829 | 4 |
| Seses | | Ears V | 34.257 | 34.267 | 9% | 368,77 | 184,69 | -49% | 9.727.068 | 4.477.641 | -4.249.427 | |
| | | Ewe VI | 5.224 | 5.224 | 9% | 60.19 | 184,68 | 247% | 277.642 | 964.226 | 696.694 | 3 |
| | | Buses Total | 52.287 | 52.267 | 0% | 458,96 | 327,99 | -29% | 23,997,817 | 17,149,448 | 4.848.379 | _ |
| | | pe-Euro | 4.319 | 4.319 | 9% | 1034,69 | 737,38 | -29% | 4.468.571 | 3.184.428 | -1.284.143 | |
| A3bH- | | Eurol | 1.883 | 1.853 | 0% | 748,71 | 583,48 | -20% | 1.387.291 | 1.025.551 | -361.748 | |
| leavy Duty | | Earl I | 11.082 | 11.092 43.481 | 9% 9% | 817,98 | 587,98 | -38% | 9.072.840 | 5.633.460 | -3.439.381 | |
| Vehicle: | Diesel Oil | Ears III | 43.481 | 29.233 | 95 | 631,55 396,88 | 361,64 283,72 | -43% -39% | 27.460.779 11.672.060 | 15.724.631 0.294.100 | -11.736.147 -3.279.768 | |
| Trucks & | | Ears V | 329,726 | 29.233 | 2% | 264.17 | 163,49 | -40% | 93,413,973 | 80.496.496 80.496.496 | -3.278.768 -42.967.477 | |
| Lorries | | Ears VI | 170,797 | 170,767 | 2% 2% | 67,49 | 153,49 | 167% | 9.813.364 | 26.292.007 | 16.388.684 | 1 |
| | | Trucks Total | 589,411 | 589,411 | 976 9% | 264.69 | 187,60 | -30% | 157,189,675 | 110,520,793 | -86.668.973 | |
| | | | 5,744 | 5,744 | 9% | 125.41 | 157,28 | 25% | 720.441 | 983,470 | -46.668.913 183.628 | |
| | | pre-Euro Euro I | | 3.517 | 8% 8% | 125,41 | | 38% | 120.441 448.086 | 583.470 619.819 | 163.828 171.733 | |
| LA3ble - | | Euro 1 Euro 2 | 3.517 | 3.382 | 95 | 127,35 | 176,22 | 30% 55% | 430.660 | 685.965 | 235.306 | |
| Motorised | Gaspine | Ears 3 | 5.011 | 5.011 | 95 | 40.29 | 196,93 | 389% | 234.126 | 1.144.415 | 910.309 | 3 |
| Two: Wheelers | Catomie | Ears d | 5.011 | 5.011 | 9% | 16,96 | 180,00 | -180% | 236.126 | 1.104.415 | 910 209 736 | 10 |
| (MQWH) | | Earl 6 | 0 | 0 | 9% | 16,96 | | -180% | | 101 | 736 | 10 |
| | | M2Ws Total | 18,459 | 18.459 | 9% 9% | 99.32 | 180,65 | 82% | 1.833.382 | 3.334.472 | 1.501.090 | |
| | | | | | | | | | | | | |

adjustment_de-a 9/12

| | | | | Activity Dat | 3 | Imp | led Emission | Factor | | NO, Emi | ssions | |
|------------------------|------------|------------------|-------------------|--------------|------------|---------|--------------|------------|-------------|-------------|--------------|----------|
| ER Code | Fuel | | current | | difference | current | adjusted | difference | current | adjusted | adjustment | differen |
| | | | in | | in [5] | | [kg/TJ] | in (%) | | in Red | | in [N |
| | | ребиз | 11.792 | 11.792 | 9% | 634.76 | 644,11 | -14% | 7,479,914 | 6.410.967 | -1.867.967 | |
| | | Ears 1 | 20.270 | 20.270 | 9% | 372.26 | 241,68 | -36% | 7,545,483 | 4.090.000 | -2 646 596 | |
| | | Eura 2 | 36.062 | 36.062 | 2% | 212.73 | 143,11 | -33% | 7.671.681 | 5.160.89T | -2.510.693 | |
| | | | | | 274 | 38,17 | 75.50 | -1% | | | 42.233 | |
| | Gaspline | Earn 3 | 83.039 334.413 | 63,039 | | | | | 4.801.452 | 4.759.259 | | |
| | | Euro 4 | | 334,413 | 9% | 53,74 | 50,17 | -1% | 17.969.964 | 16.777.445 | -1.192.468 | |
| | | Euro 5 | 183,374 | 183.374 | 9% | 19,09 | 50,17 | 163% | 3.500.T45 | 9.199.834 | 5.009.008 | 1 |
| | | Euro 6 | 66.332 | 66.332 | 9% | 26,67 | 50,17 | 80% | 1.768.917 | 3.327.850 | 1.558.533 | - |
| 1.A.3.b i . | | Gasoline total | 715,272 | 715,272 | 0% | 70,93 | 70,65 | 85. | 50.736.967 | 50,535,049 | 201.918 | |
| assenger | | ребиз | 1,290 | 1,290 | 9% | 308,76 | 264,96 | -14% | 396.262 | 339.173 | -56.009 | |
| Cars | | Eura 1 | 3,749 | 3,749 | 2% | 299.38 | 289,66 | -10% | 1,122,449 | 1,011,026 | -111.425 | |
| | | Ews 2 | 16,584 | 16,584 | 9% | 407,19 | 221,40 | -45% | 6.720.132 | 3.663.964 | -3.066.168 | - |
| | Diesel Oil | Euro 3 | 61.388 | 61,398 | 9% | 602,50 | 179,24 | -70% | 36.991.999 | 11.005.049 | -25.586.550 | - |
| | Diese Oil | Euro 4 | 175,840 | 175,840 | 8% | 405,78 | 155.24 | -61% | 71.352.220 | 27.474.006 | 43.878.214 | 4 |
| | | Euro 5 | 299.684 | 299.684 | 0% | 433.94 | 155,24 | -64% | 130.032.044 | 45.819.229 | -83 212 815 | 4 |
| | | Euro 6 | 116,634 | 116,634 | 9% | 268.76 | 156,24 | -40% | 30.427.585 | 10.232.785 | -12:194.778 | - |
| | | Diesel oil tutal | 625,119 | 675,119 | 0% | 410.36 | 160,76 | .61% | 277.041.660 | 100,535,230 | .168.506.438 | |
| | | PCs Total | 1,390,391 | 1,399,391 | 8% | 215.75 | 114.41 | .51% | 397,778,697 | 159,070,280 | .168.708.367 | |
| | | pre-Euro | 910 | 910 | 2% | 662,79 | 646.96 | :1% | 593.798 | 687 663 | 4.25 | |
| | | Eura 1 | 136 | 136 | 2% | 900.31 | 312,78 | -85% | 122,126 | 42,425 | -79.700 | 4 |
| | | Euro 2 | 540 | 540 | 9% | 300.39 | 217,84 | -21% | 162.311 | 117,797 | -44.604 | |
| | | | 680 | 680 | 0% | 908.43 | 111.57 | 3% | 70.432 | 72.731 | 2.299 | 1 |
| | Gaseline | Euro 3 | 1.684 | | | | 52.36 | 7% | | | | |
| | | Euro 4 | | 1.684 | 9% | 49,06 | | | 78.714 | 84.003 | 5.209 | |
| | | Euro S | 1.724 | 1.724 | 9% | 19,02 | 52,36 | 164% | 36.157 | 90.258 | 56.108 | 1 |
| Albii . | | Ears 6 | 363 | 363 | 9% | 19,66 | 62,36 | 181% | 6.764 | 19.992 | 12.226 | 1 |
| John Duny | | Gasoline total | 5,926 | 5.906 | 8% | 190,27 | 171,06 | -5% | 1.068.292 | 1.013.678 | -54.614 | |
| Vehicles | | ha Ena | 2.169 | 2.169 | 9% | 414,87 | 386,79 | -26% | 899.848 | 686.433 | -234.416 | |
| (LOVA) | | Euro 1 | 1,790 | 1,790 | 9% | 391,09 | 215,25 | -45% | 700.169 | 385.371 | -314.758 | - |
| | | Euro 2 | 4.223 | 4.223 | 9% | 323,43 | 193,31 | -40% | 1.365.994 | 816.452 | -549.542 | - |
| | Diesel Oil | Euro 3 | 13.582 | 13.582 | 0% | 588,91 | 150,77 | -74% | 8.004.323 | 2.049.233 | -5.955.090 | - |
| | Dieser On | Euro 4 | 43.141 | 43,141 | 0% | 504.48 | 92,40 | -82% | 21.763.989 | 3.986.141 | -67.777.768 | 4 |
| | | Euro S | 74.231 | 78.231 | 8% | 434.10 | 92,40 | -79% | 32,223,263 | 6.050.700 | -25.364.503 | - |
| | | Euro 6 | 4.901 | 4.901 | 8% | 163,49 | 92,40 | -40% | 765.285 | 454.676 | -300 609 | - |
| | | Diesel oil total | 144,068 | 144,068 | 6% | 414.12 | 105,62 | .77% | 65,712,732 | 15,216,007 | -50.496.726 | |
| | | LDVs Total | 149,994 | 149,994 | 8% | 445.23 | 108,20 | -76% | 66,781,025 | 16,229,684 | -50.551.340 | |
| | | pre-Euro | 891 | 891 | 9% | 1070.81 | 1019.23 | -5% | 954,197 | 508.234 | 45.963 | |
| | | Eurol | 583 | 583 | 9% | 731.38 | 752.57 | 3% | 433,675 | 446.236 | 12.560 | |
| | | Earl | 4.375 | 4.375 | 05 | 768.25 | 645.00 | -10% | 3,448,614 | 2.822.021 | -626.534 | |
| A3bii. | | Euro II | 10.333 | 10.333 | 9% | 632.67 | 450,91 | -21% | 6.539.364 | 4.741.827 | -1.797.536 | - |
| leavy Duty Vehicle: | Diesel Oil | Ears IV | 4.449 | 4.449 | 95 | 475.90 | 362.29 | -20% | 2.117.210 | 1.586.001 | -658.338 | |
| Buses | | | 34.390 | 24.390 | 25 | | | | | | | |
| | | Ears V | | | | 366,38 | 186,22 | -49% | 8.935.974 | 4.617.617 | -4.418.467 | 1 |
| | | Ewa M | 9,126 | 9,126 | 9% | 62.79 | 186,22 | 195% | 673.066 | 1.680.481 | 1.117.336 | 1 |
| | | Buses Total | 54,157 | 54.157 | 8% | 494,73 | 308,24 | -27% | 23,062,109 | 16.683,117 | 4.308.992 | |
| | | pre-Euro | 3.933 | 3.933 | 9% | 1004,01 | 737,35 | -29% | 4.067.249 | 2.980.319 | -1.156.530 | - |
| | | Eart | 1.585 | 1.585 | 9% | 748,96 | 587,92 | -32% | 1.163.462 | 789.813 | -373.589 | - |
| A3bH- | | Ears I | 8.876 | 8.876 | 0% | 817,75 | 585,52 | -38% | 7.258.045 | 4.485.828 | -2.771.218 | - |
| eavy Duty Vehicle: | Diesel Oil | Ears II | 36.167 | 36.167 | 9% | 630,01 | 360,66 | -43% | 21.553.288 | 12.251.155 | -9.302.133 | |
| Venecie: Trucks & | Dieser Oil | Ears IV | 34.297 | 36.267 | 9% | 396,94 | 291,06 | -29% | 9.640.394 | 6.945.501 | -2.794.893 | - |
| Lorries | | Eura V | 299,736 | 299,736 | 9% | 297,22 | 163,92 | -46% | 74,600,233 | 39.978,610 | -34.621.623 | |
| | | Ewa VI | 291,460 | 261,460 | 2% | 61,77 | 153,92 | 149% | 16.149.288 | 40.244.036 | 24.094.748 | 1 |
| | | Trucks Total | 594,013 | 594,013 | 8% | 225,31 | 180,97 | -20% | 134.431.899 | 107,496,252 | -26.535.637 | |
| | | pre-Euro | 5.543 | 5.543 | 9% | 125.59 | 155,78 | 24% | 696.072 | 883.299 | 167.218 | |
| | | Euro 1 | 3,360 | 3,360 | 25 | 327.31 | 177.29 | 39% | 427.113 | 585,796 | 168.502 | |
| A3ble - | | Euro 2 | 3.375 | 3.375 | 95 | 125.04 | 197,68 | 55% | 421.951 | 66T.076 | 345.127 | |
| Motorised Two | Gaspine | Euro 3 | 6.443 | 6.643 | 95 | 40.30 | 197,68 | 391% | 209,627 | 1.273.571 | 1.013.943 | 3 |
| Wheelers | Catorile | | | | | | | | | | | |
| (MZWs) | | Ears 4 | 66 | 66 | 9% | 17,47 | 197,68 | 1031% | 1.134 | 12.802 | 11.696 | 10 |
| | | Ears 6 | 0 | 0 | 9% | | | 0% | | 0 | | |
| | | M2Ws Total | 18,785 | 18,785 | 8% | 96,14 | 181,66 | 89% | 1,805,897 | 3,452,476 | 1.606.579 | |
| | | | | | | | | | | | | |

| | | | | Activity Date | 9 | Impli | ed Emission | Factor | | NO, Emi | ssions | |
|-----------|------------|------------------|-----------|----------------------|------------|---------|-------------|------------|-------------|------------------|--------------|-----------|
| ER Code | Fuel | | current | | difference | current | adjusted | difference | current | adjusted | adjustment | different |
| | | | in [| U) | in [N] | in p | [LT/gr | in [5] | | in [kg] | _ | in [5] |
| | | ребиз | 12.292 | 12.292 | 9% | 636,73 | 644,11 | -14% | 7.914.267 | 6.689.107 | -1.126.108 | -16 |
| | | Ears 1 | 17,449 | 17,449 | 9% | 372,99 | 241,68 | -06% | 6,689,311 | 4.217,044 | -2.291.267 | -06 |
| | | Ews 2 | 30.435 | 30.435 | 0% | 217,43 | 141,75 | -35% | 6.617.570 | 4.314.140 | -2.303.430 | -36 |
| | | Euro 3 | 54.271 | 54,271 | 9% | 78,40 | 76.27 | -3% | 4.254.938 | 4.139.376 | -115.562 | |
| | Gassline | Euro 4 | 315,086 | 315,086 | 9% | 54.96 | 51.25 | -7% | 17.316.320 | 16,151,861 | -1.154.458 | |
| | | Euro 5 | 180,245 | 180,245 | 9% | 19.17 | 51.26 | 167% | 3.485.382 | 9,239,815 | 5.784.513 | 15 |
| | | Euro 6 | 116,791 | 116,791 | 9% | 26,66 | 51,26 | 92% | 3.060.226 | 5.884.372 | 2 824 146 | 1 |
| LARDI. | | Gasoline total | 724,571 | 734,571 | 8% | 67,66 | 69,88 | 35. | 49.026.074 | 50,634,714 | 1,607,848 | |
| зыводог | | ре-биз | 1.310 | 1.310 | 9% | 306,09 | 264,96 | -13% | 480.983 | 347.020 | -63.893 | -1 |
| Cars | | Eura 1 | 3.360 | 3,360 | 9% | 299,17 | 271,67 | -9% | 1,002,298 | 910.182 | 92.116 | |
| | | Euro 2 | 13,798 | 13,788 | 2% | 407,17 | 222,40 | -45% | 5.614.130 | 3,066,393 | -2 547 736 | 4 |
| | | Euro 3 | 52,128 | 52,128 | 8% | 608.05 | 179.65 | -70% | 31,696,478 | 9.384.798 | -22.331.769 | -7 |
| | Diesel Oil | Eura 4 | 157,847 | 187,847 | 9% | 410.10 | 158.34 | 41% | 64,733,465 | 24.583.323 | -39,740,142 | 4 |
| | | Euro 5 | 283.480 | 283,400 | 0% | 423.39 | 155.34 | -63% | 120,157,686 | 44,873,190 | -75.254.465 | 4 |
| | | Euro 6 | 184,760 | 184,760 | 9% | 262.61 | 150.34 | -40% | 49.521.163 | 29,255,985 | -19.265.258 | 4 |
| | | Diesel oil tutal | 696,582 | 696,582 | 85 | 390.65 | 161.95 | .59% | 272,126,091 | 112,010,721 | .159,315,378 | - |
| | | PCs Total | 1.421.162 | 1,621,162 | 65 | 225,98 | 115,01 | .005 | 321.152.965 | 163,445,435 | .157,207,530 | |
| | | рэ Еиз | 940 | 940 | 2% | 661.61 | 646.96 | -47% | 612.240 | 606,918 | 6 322 | - |
| | | Eura 1 | 124 | 124 | 2% | 906.23 | 312,78 | 45% | 112.083 | 38.682 | .73.401 | |
| | | | 485 | 485 | 624 | 302.12 | 221.62 | -21% | 140.344 | 182,950 | -37.394 | 4 |
| | | Euro 2 | 586 | 586 | 15 | 110.57 | 115.36 | 4% | | | | - |
| | Gaseline | Euro 3 | 1,476 | 1.476 | | | 53.38 | | 65.965 | 68.812 76.816 | 2.857 | |
| | | Euro 4 | | | 0% | 50,72 | | 5% | 74.877 | | 3 536 | 16 |
| | | Euro S | 1.660 | 1.660 | 9% | 21,73 | 53,30 | 146% | 36.240 | 89.034 | 52.706 | |
| Albii . | | Ears 6 | 918 | 919 | 9% | 19,68 | 63,38 | 187% | 17.062 | 49.000 | 31.548 | 1 |
| John Duny | | Gosoline total | 6.186 | 6.186 | 6% | 171,15 | 167,18 | .7% | 1.058,799 | 1.034.211 | -24.508 | |
| Vehicles | | ha Ena | 2.067 | 2.067 | 9% | 410,41 | 306,79 | -26% | 890.499 | 631.163 | -219.336 | - 4 |
| (LOVA) | | Ears 1 | 1,538 | 1,538 | 9% | 390,47 | 215,25 | -45% | 600.716 | 331.158 | -269.558 | 4 |
| | | Euro 2 | 3.580 | 3.580 | 9% | 321,26 | 193,04 | -40% | 1.143.793 | 687.293 | -456.501 | 4 |
| | Diesel Oil | Euro 3 | 11.664 | 11,664 | 9% | 595,08 | 150,79 | -75% | 6.940.879 | 1.758.747 | -6.182.132 | -7 |
| | | Euro 4 | 39.050 | 39.050 | 9% | 506,78 | 93,09 | -82% | 19.789.647 | 3.635.035 | -16.154.612 | -1 |
| | | Euro S | 75.799 | 75.789 | 9% | 412,66 | 93,09 | -70% | 32.790.966 | T.054.945 | -26.736.811 | - |
| | | Eura 6 | 19.626 | 19,625 | 9% | 161,71 | 93,09 | -39% | 2.977.439 | 1.826.876 | -1.168.994 | |
| | | Diesel oil tutal | 153,264 | 153,264 | 8% | 424,66 | 183,89 | -76% | 65.083.930 | 15,925,216 | -49.168.714 | |
| | | LDVs Total | 199.470 | 199,470 | 8% | 414,83 | 106,35 | -74% | 66.152.729 | 16.959.427 | -49.193.302 | |
| | | ps-Euro | 736 | 736 | 9% | 1073.33 | 1019,23 | -8% | 790.259 | 750.425 | -35.834 | |
| | | Eart | 411 | 411 | 9% | 731,97 | 752,57 | 3% | 300.684 | 389.062 | 8.459 | |
| A3bii. | | Eart I | 3.325 | 3.325 | 9% | 767,91 | 645,79 | -10% | 2,620,067 | 2.147.460 | -472.606 | |
| navy Duty | | Ears II | 8.678 | 8.678 | 9% | 631,33 | 459,12 | -21% | 5.478.480 | 3.984.005 | -1.494.395 | 4 |
| Vehicles | Diesel Oil | Ears IV | 3.023 | 3.023 | 9% | 474.07 | 362.49 | -20% | 1.012.380 | 1.347.600 | -464.700 | 4 |
| Beses | | Ears V | 21.913 | 21.913 | 9% | 363.92 | 186,84 | -49% | 7.907.976 | 4.063.686 | -3.894.291 | 4 |
| | | Ewa VI | 14.696 | 14.696 | 2% | 68.62 | 185.84 | 219% | 854.215 | 2,712,580 | 1.858.375 | 2 |
| | | Buses Total | 53,382 | 53,382 | 8% | 379,80 | 296,71 | -23% | 19,793,901 | 15,384,828 | 4.489.073 | - |
| | | prečira | 3,686 | 3,606 | 9% | 1034.40 | 737.38 | -29% | 3,730,272 | 2.689.016 | -1.071.256 | - |
| | | Eurol | 1.311 | 1.311 | 8% | 748.03 | 465.38 | -31% | 980.842 | 614.151 | -366,690 | |
| A3bH- | | Earl I | 7.007 | 7.007 | 95 | 817.66 | 583.45 | -30% | 5.794.876 | 3.568.026 | -2.226.851 | |
| eavy Duty | | Ears II | 36,086 | 26,086 | 9% | 630.17 | 366.72 | -44% | 16.942.661 | 9.563.641 | -7.378.821 | |
| Vehicle: | Diesel Oil | Ears IV | 20.082 | 20.002 | 9% | 397.77 | 279.34 | -30% | 7.966.414 | 6.587.466 | -2.368.568 | |
| Trucks & | | Ears V | 264.366 | 264.365 | 8% | 298,16 | 164,36 | -47% | 69.290.799 | 31.636.367 | 47 745 342 | |
| Lorries | | Ears VI | 335.065 | 335.065 | 2% | 65.62 | 154.35 | 135% | 21,985,366 | 51.718.641 | 29 733 275 | 1 |
| | | | 598,263 | 598,263 | 8% | 195.02 | 175,92 | .10% | 116,671,141 | 105,246,508 | -11.424.633 | |
| | | Trucks Total | | | | | | | | | | |
| | | pre-Cara | 5.336 | 5.336 | 9% | 125,91 | 157,19 | 25% | 671.888 | 838,789 | 166.881 | |
| A3bir - | | Ears 1 | 3.257 | 3.257 | 0% | 125,39 | 177,86 | 41% | 411.617 | 579.244 | 167.627 | |
| Botorised | | Euro 2 | 3.396 | 3.396 | 0% | 122,55 | 198,33 | 62% | 416.200 | 673.548 | 257.348 | |
| Two | Gassline | Ears 3 | 6.741 | 6.741 | 9% | 40,22 | 190,33 | 393% | 271.107 | 1.336.966 | 1.065.849 | 31 |
| (MDWs) | | Eura 4 | 430 | 430 | 9% | 18,29 | 199,33 | 986% | 7.962 | 86.270 | 77.408 | 96 |
| (ment) | | Ears 6 | 0 | 0 | 0% 0% | 92,83 | 183,39 | 0% | | 0 | | |
| | | M2Ws Total | 19,160 | 19,160 | | | | 1615 | 1,778,674 | 3,513,787 | 1,235,114 | |

adjustment_de-a 10/12

| | | | - 1 | Activity Date | | Impli | ed Emission I | Factor | | NO, Emir | ssions | |
|------------------------|--------------|------------------|--------------------|--------------------|------------|------------------|---------------|--------------|---------------------------|--------------------------|----------------------------|-----------|
| NFR Code | Fuel | | current | adjusted | difference | current | adjusted | difference | current | adjusted | adjustment | different |
| | | | in [| T.I | in [N] | | [LT/gr | in [5] | | in [kg] | | in [5] |
| | | ребиз | 12.219 | 12.219 | 8% | 637,59 | 644,11 | -19% | 7.790.966 | 6.649.721 | -1.142.234 | -1 |
| | | Ews 1 | 14,362 | 14,362 | 8% | 374,24 | 241,68 | -05% | 6.371,161 | 3,469,643 | -1.902.518 | -0 |
| | | Ews 2 | 24.295 | 24.295 | 8% | 221.07 | 111,06 | -50% | 5.360.977 | 2,688,163 | -2.862.814 | -6 |
| | Gassine | Euro 3 | 43.642 | 43.642 | 8% | 80,15 | 76,96 | 4% | 3.497.781 | 3.358.617 | -139.164 | |
| | - | Euro 4 | 276,736 | 278,738 | 626 | 55,58 | 52,30 | -1% | 15.683.488 | 14.578.755 | -1.824.743 | |
| | | Euro 5 | 185,830 | 165,530 | 0% | 19,35 | 52,30 | 170% | 3.226.282 | 8.725.668 | 5.497.456 | 17 |
| | | Euro 6 | 159.041 | 159.041 | 0% | 0,00 | 52,30 | 0% | 4.190.422 | 8.318.250 | 4.127.828 | - 1 |
| 1A3bi. | | Gasoline total | 689.027 | 699.027 | 0% | 64,42 | 60,36 | 65. | 45.032.996 | 47.786.857 | 2,753,820 | |
| Passenger Cars | | heems | 1,363 | 1.363 | 9% | 300,66 | 264,96 | -13% | 395.466 | 346.173 | -60.293 | -1 |
| Cars | | Ears 1 | 2.849 | 2.849 | 9% | 299, 17 | 272,06 | -9% | 962,432 | 776.166 | -77.277 | |
| | | Euro 2 | 10.784 | 10.784 | 9% | 407,20 | 222,87 | 45% | 4.391.393 | 2,483,536 | -1.987.858 | - |
| | Diesel Oil | Earn 3 | 40.796 | 40.796 | 9% | 612,49 | 180,15 | -21% | 24.932.029 | T.333.241 | -17.558.788 | -1 |
| | | Euro 4 | 130.534 | 130.534 | 9% | 414,71 | 160,48 | 41% | 54,133,837 | 20.937.329 | -33.196.508 | 4 |
| | | Euro S Euro 6 | 251.212 220.685 | 251.212 226.685 | 95 95 | 415,25 254,67 | 190,48 | -61% -31% | 184.585.785 58.284.140 | 40.293.731 36.680.440 | -64.273.836 -21.603.708 | 4 |
| | | Diesel oil tutal | 666,074 | 229.085 606.034 | 05 | 371,66 | 163,38 | -31% | 247,596,063 | 100,760,604 | .130.207.450 | |
| | | PCs Total | 1,365,101 | 1,365,101 | 60 | 214.34 | 114,68 | .60 | 292,589,060 | 156,555,421 | .136.033.639 | |
| | | pro-Euro | 1.365.101 | 917 | 2% | 914,34 660,53 | 645,95 | -89% | 596,069 | 682.662 | -136.033.639 -4.207 | |
| | | Eura 1 | 188 | 188 | 2% | 911.58 | 312,78 | -86% | 98.528 | 33.805 | -84.723 | 4 |
| | | Euro 2 | 377 | 377 | 7% | 303.64 | 224.45 | -26% | 114.682 | 84,713 | -29,839 | - |
| | | Euro 3 | 511 | 511 | 1% | 111.02 | 118.84 | 6% | 57.282 | 60.739 | 3.537 | , |
| | Gaseline | Euro 4 | 1.275 | 1.275 | 1% | 52.02 | 54.36 | 4% | 66.295 | 69.276 | 2.550 | |
| | | Euro S | 1483 | 1483 | 2% | 23.70 | 54.36 | 129% | 35.160 | 80.626 | 45.465 | 12 |
| | | Eura 6 | 1.643 | 1.643 | 9% | 18,69 | 64.36 | 192% | 30,660 | 89.326 | 68.775 | 1 |
| A3bii . | | Gasoline total | 6,315 | 6.315 | 8% | 158.22 | 160,11 | 15. | 999,199 | 1.011.138 | 11.839 | |
| Light Duty | | pro-Euro | 1.872 | 1.872 | 2% | 411.97 | 306,79 | -26% | 771,307 | 674.412 | -196.525 | - 4 |
| Vehicles | | Eura 1 | 1,295 | 1,295 | 8% | 389.84 | 215.25 | 45% | 483,129 | 272.296 | -229.842 | |
| (LOV4) | | Euro Z | 2.842 | 2.842 | 9% | 318.56 | 193,80 | -39% | 905.309 | 550,759 | -354.540 | - |
| | | Euro 3 | 9.363 | 9.363 | 0% | 559, 10 | 150.74 | -75% | 5.609.152 | 1.411.299 | 4.197.853 | - 4 |
| | Diesel Oil | Euro 4 | 33.232 | 33.232 | 0% | 509.42 | 93.81 | -82% | 16,929,185 | 3.117.457 | -13.811.648 | 4 |
| | | Euro S | 66.283 | 66.283 | 8% | 412.92 | 93.81 | -70% | 29.654.080 | 6.217.060 | -22.477.828 | 4 |
| | | Euro 6 | 39.482 | 39.482 | 8% | 168,79 | 93,81 | -30% | 6.941.616 | 3,686,228 | -2.345.397 | -1 |
| | | Diesel oil total | 154,259 | 154,259 | 8% | 384,71 | 102,69 | -73% | 59.344.525 | 15,840,310 | -43.504.215 | - |
| | | LDVs Total | 160,574 | 160,574 | 8% | 375,80 | 194,94 | -72% | 60.343,725 | 16,851,449 | -43.492.276 | |
| | | pre-Euro | 547 | 547 | 9% | 1078,16 | 1019.23 | -8% | 589.357 | 557,147 | -32.210 | |
| | | Eurol | 237 | 237 | 65 | 732.76 | 752.57 | 3% | 173,678 | 176.368 | 4.830 | |
| A3bii. | | Eart I | 2.270 | 2.270 | 0% | 767,63 | 646,33 | -10% | 1.788.686 | 1.467.437 | -321.249 | -4 |
| leavy Duty | Diesel Oil | Ears II | 6.757 | 6.757 | 0% | 630,09 | 459,32 | -21% | 4.262.724 | 3.103.402 | -1.159.232 | 4 |
| Vehicles | Desire On | Ears IV | 3.043 | 3.043 | 8% | 473,96 | 362,73 | -25% | 1.439.790 | 1.073.303 | -366.467 | 4 |
| Seses | | Ears V | 19,109 | 19,109 | 8% | 362,42 | 186,37 | -49% | 6.663.266 | 3.376.046 | -3.198.249 | 4 |
| | | Ewe VI | 20,670 | 20,670 | 9% | 56.89 | 186,37 | 228% | 1,176,026 | 3.852.314 | 2.676.288 | 25 |
| | | Buses Total | 91,634 | 51,634 | 8% | 309,75 | 283,50 | -19% | 15,993,526 | 13,607,106 | -2.386.429 | |
| | | pre-Care | 3.252 | 3.252 | 9% | 1004,82 | 737,38 | -29% | 3.375.369 | 2.485.071 | -979.288 | - 4 |
| | | Eart | 1.094 | 1.094 | 65 | 747,82 | 465,38 | -31% | 818.052 | 512.376 | -305.674 | |
| A3bH- | | Ears I | 5.544 | 5.544 | 0% | 817,44 | 581,68 | -39% | 4.532.198 | 2.781.510 | -1.750.658 | |
| leavy Duty Vehicle: | Diesel Oil | Ears II | 20.583 | 20.583 | 9% | 629,54 | 363,66 | -44% | 12.957.751 | T.27T.279 | -6.600.472 | 4 |
| Trucks & | District Co. | Ears IV | 15.912 | 15.912 | 9% | 398,09 | 276,23 | -31% | 6.334.421 | 4.395.424 | -1.908.997 | - |
| Lorries | | Ears V | 196,983 | 196,983 | 9% | 292,40 | 154,68 | -47% | 45,964,163 | 24.293.309 | -21.620.843 | 4 |
| | | Ewa VI | 381,799 | 381,799 | 9% | 68,76 | 154,68 | 126% | 26.251.482 | 59.065.898 | 32,804,495 | 12 |
| | | Trucks Total | 585,186 | 585,186 | 0% | 171,18 | 172,10 | 1% | 100.173.337 | 180,710,869 | 537.532 | |
| | | pre-Euro | 4.940 | 4.940 | 9% | 125,05 | 158,61 | 26% | 622,686 | 783.451 | 160.795 | - 7 |
| LA3ble - | | Ears 1 | 2.965 | 2.965 | 9% | 125,14 | 177,79 | 41% | 374.114 | 527.294 | 153.150 | 4 |
| Motorised | | Euro 2 | 3.221 | 3.221 | 9% | 129,33 | 198,64 | 65% | 387.586 | 639.833 | 252.237 | |
| Two. | Gassline | Ears 3 | 6.241 | 6.241 | 9% | 40,24 | 190,64 | 394% | 291.126 | 1.239.680 | 908.962 | 31 |
| (MDWs) | | Ears 4 | 1.130 | 1.130 | 9% | 29,41 | 199,64 | 973% | 23.066 | 224.682 | 201.436 | 6 |
| (seems) | | Eara 6 | 0 | 0 | 9% | 0,00 | | 0% | | 0 | | |
| | | M2Ws Total | 18.497 | 18.497 | 8% | 89,66 | 184,61 | 106% | 1,458,558 | 3,454,757 | 1,756,209 | 1 |
| A.J.b. Road | | | 2,180,993 | | 05 | 215.85 | 133,49 | 385 | 470,750,206 | 291,139,612 | .179.618.593 | - 1 |

| | | | | Activity Date | | | led Emission | | | NO, Emi | | |
|--------------------------|------------|------------------|-----------|---------------|------------|---------|--------------|------------|-------------|-------------|--------------|--------|
| FR Code | Fuel | | current | adjusted | difference | current | adjusted | difference | current | adjusted | adjustment | |
| | | | in [| D) | in [N] | in | [kg/TJ] | in [5] | | in [kg] | | in [5] |
| | | ребиз | 13.669 | 13,660 | 9% | 638,58 | 644,11 | -15% | 9.664.621 | 7.382.698 | -1.291.822 | -1 |
| | | Ews 1 | 12,427 | 12,427 | 9% | 379,32 | 241,68 | -36% | 4.701.480 | 3.083.383 | -1.698.096 | -0 |
| | | Ews 2 | 20,086 | 20,086 | 9% | 225.58 | 92.60 | -69% | 4.531.070 | 1.858.018 | -2.673.052 | - 4 |
| | Gassine | Euro 3 | 36.216 | 36.216 | 9% | 82,22 | 78,12 | -8% | 2.977.840 | 2.829.166 | -148.673 | |
| | Cataline | Euro 4 | 255,220 | 295,220 | 9% | 57,04 | 53,29 | -7% | 14.558.295 | 13.589.621 | -858.554 | |
| | | Euro 5 | 100.537 | 160.537 | 9% | 19,77 | 53,29 | 170% | 3.173.726 | 8.584.356 | 5.380.628 | 11 |
| | | Euro 6 | 206.636 | 206,636 | 9% | 25,63 | 53,29 | 180% | 5.295.099 | 11.010.782 | 5.715.603 | 10 |
| 14.3.01. | | Gasoline total | 764,691 | 764,691 | 8% | 62,30 | 60,45 | 10% | 43,981,941 | 40.230.025 | 4.336.804 | |
| assenger | | ребиз | 2.736 | 2.736 | 9% | 330,76 | 264,96 | -21% | 913,198 | 724.923 | -198.275 | 4 |
| Cars | | Ews 1 | 2.565 | 2.565 | 9% | 299,00 | 272,06 | -9% | 766,913 | 687,786 | 49.127 | |
| | | Ews 2 | 8.891 | 8.891 | 9% | 407,19 | 229.16 | -44% | 3.620.296 | 2.037.460 | -1.582 R26 | |
| | Diesel Oil | Euro 3 | 33.019 | 33.019 | 9% | 615,11 | 180,42 | -21% | 20.310.125 | 5.95T.483 | -14.352.723 | |
| | Diese Un | Euro 4 | 111.335 | 111.335 | 9% | 419,97 | 162,44 | -61% | 46,668,685 | 18.085.228 | -28.583.457 | 4 |
| | | Euro 5 | 231,794 | 231,784 | 0% | 410,37 | 162,44 | -60% | 95.117.643 | 37.680.987 | -57.456.645 | 4 |
| | | Euro 6 | 273.511 | 273.511 | 9% | 227,30 | 162,44 | -29% | 62.169.238 | 44.429.104 | -17.740.054 | |
| | | Diesel oil tutal | 663,041 | 663,041 | 8% | 345,81 | 165,07 | .52% | 229,566,088 | 189,582,982 | .119.903.106 | |
| | | PCs Total | 1.368.532 | 1.368.532 | 6% | 199,83 | 115,32 | -675 | 273.468.029 | 157.821.007 | .115.647.822 | |
| | | pa Eura | 926 | 926 | 9% | 649,69 | 645,96 | -1% | 601,469 | 587.992 | -3.468 | |
| | | Euro 1 | 97 | 97 | 9% | 915,28 | 312,78 | -86% | 88.953 | 30.396 | -58.957 | |
| | | Euro 2 | 316 | 316 | 9% | 304,63 | 224,45 | -26% | 96,158 | 70.848 | -25.310 | - |
| | Casaline | Euro 3 | 447 | 447 | 9% | 112,68 | 121,47 | 8% | 50.385 | 54.293 | 3.526 | |
| | Calenda | Euro 4 | 1.126 | 1.126 | 0% | 53,00 | 55,26 | 4% | 59.682 | 62,199 | 2.547 | |
| | | Euro S | 1.361 | 1.361 | 9% | 25,34 | 55,36 | 110% | 34.240 | 74.680 | 40.432 | 1 |
| | | Euro 6 | 2.420 | 2.420 | 9% | 19,76 | 66,36 | 196% | 45.393 | 133.753 | 98.358 | - 1 |
| A.3.b ii . .ight Duty | | Gasoline total | 6,683 | 6.683 | 6% | 146,08 | 153,25 | 5% | 976.219 | 1.024.150 | 47.331 | |
| Vehicles | | pa Eura | 1,764 | 1,764 | 9% | 410.96 | 386,79 | -25% | 725,111 | 641.316 | -183.796 | |
| (LOVA) | | Ears 1 | 1,079 | 1,079 | 9% | 388,52 | 215,25 | -45% | 420.295 | 232.255 | -188.830 | |
| | | Euro 2 | 2.334 | 2.334 | 9% | 315,58 | 194,79 | -38% | 737,682 | 454,650 | -282.912 | - |
| | Diesel Oil | Euro 3 | 7,649 | 7,649 | 9% | 601,11 | 150,79 | -75% | 4.587.943 | 1.152.711 | -3.445.233 | - |
| | Diese On | Euro 4 | 26.711 | 26,711 | 9% | 512,28 | 94,57 | -82% | 14.765.365 | 2.715.154 | -11.993.154 | - |
| | | Euro S | 50.716 | 59.716 | 9% | 434,30 | 94,57 | -70% | 25.499.580 | 5.552.420 | -19.567.152 | - |
| | | Euro 6 | 99.931 | 98.931 | 9% | 146,18 | 94,67 | -35% | 9.614.686 | 6.672.892 | -3.841.614 | |
| | | Diesel oil tutal | 199,183 | 159,183 | 6% | 347,42 | 101,90 | -71% | 55.303.335 | 16.221.445 | -39.081.090 | |
| | | LDVs Total | 165,866 | 165,866 | 6% | 339,31 | 183,97 | -89% | 96.279.554 | 17,245,596 | -39.833.958 | |
| | | pre-Euro | 489 | 489 | 9% | 1080,20 | 1019,23 | -8% | 586.867 | 478.258 | -28.609 | |
| | | Eart | 147 | 147 | 9% | 736,37 | 752,57 | 2% | 165.212 | 110.583 | 2.381 | |
| A3bii. | | Eart I | 1.611 | 1.611 | 9% | 769,47 | 646,77 | -10% | 1.271.445 | 1.041.621 | -229 824 | |
| eavy Duty | Diesel Oil | Euro II | 5.789 | 5.789 | 9% | 631,66 | 459,55 | -21% | 3.686.361 | 2.623.779 | -902.572 | 4 |
| Vehicles | Design on | Ears IV | 2.747 | 2.747 | 9% | 473,92 | 362,64 | -26% | 1.302.061 | 969.413 | -332 648 | 4 |
| Beses | | Eura V | 17,120 | 17,120 | 9% | 362,91 | 186,84 | -49% | 6.213.176 | 3.199.791 | -3.014.394 | |
| | | Eara VI | 25,135 | 25,135 | 9% | 60,43 | 186,84 | 289% | 1,618,901 | 4.686.133 | 3.177.232 | 2 |
| | | Buses Total | 52,939 | 52,939 | 6% | 274,41 | 247,81 | -10% | 14,527,012 | 13,118,578 | -1.408.434 | |
| | | pre-Euro | 3.140 | 3.140 | 9% | 1034,96 | 737,38 | -29% | 3.250.020 | 2.315.443 | -534.577 | - |
| | | Eart | 909 | 909 | 9% | 747,60 | 468,38 | -31% | 724.240 | 453.754 | -279.456 | - |
| A3.b III - | | Euro I | 4.565 | 4.565 | 9% | 817,42 | 581,04 | -39% | 3.734.343 | 2.288.967 | -1.445.376 | - |
| eavy Duty Vehicle: | Diesel Oil | Euro II | 16.377 | 16.377 | 9% | 629,94 | 361,68 | -64% | 10.300.323 | 5.756.580 | 4.543.743 | |
| Trucks & | Desire On | Ears IV | 13.127 | 13.127 | 9% | 398,86 | 273,43 | -31% | 6.236.679 | 3.689.330 | -1.646.349 | |
| Lorries | | Ears V | 126,233 | 126,233 | 9% | 296,13 | 154,92 | -49% | 36,960,689 | 19,481,449 | -17,669,168 | |
| | | Ewa VI | 432,498 | 432,498 | 9% | 72.08 | 154,92 | 115% | 31,175,496 | 67,003,863 | 35.828.357 | 1 |
| | | Trucks Total | 595,913 | 595,913 | 6% | 150,35 | 199,17 | 10% | 91,380,790 | 100,889,376 | 9.428.676 | |
| | | pr-Sur | 4.813 | 4.813 | 9% | 125,69 | 164,79 | 31% | 684.997 | 792,771 | 187.714 | |
| A3blv - | | Ears 1 | 2.835 | 2.835 | 9% | 125,39 | 177,29 | 41% | 385.486 | 582.589 | 147.113 | |
| Motorised | | Euro 2 | 3.094 | 3.094 | 9% | 119,33 | 190,06 | 67% | 309.224 | 615.317 | 346.093 | |
| Two | Gassline | Ears 3 | 6.082 | 6.062 | 9% | 40,03 | 190,06 | 361% | 240.284 | 1.193.617 | 963.333 | 3 |
| Wheelers | | Ears 4 | 2.086 | 2.005 | 9% | 21,69 | 199,96 | 917% | 43.489 | 399.667 | 366.178 | |
| (MWW) | | Eura 6 | 0 | 0 | 9% | 0,00 | | 0% | | 0 | | |
| | | M2Ws Total | 18,750 | 18,750 | 8% | 86,05 | 186,83 | 117% | 1,613,450 | 3,582,541 | 1.889.491 | 1 |
| | | | | | | | | | | | | |

REVISION OF ADJUSTMENT PROPOSAL COMPARED TO SUBMISSIONS 2014 to 2019

adjustment de-a 11/12

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Adjustment 2014 (accepted) 7,8 | -105.6 | -101.3 | -95.7 | -91.7 | | | | | | |
| Adjustment 2015 (accepted) 9,10) | -100.3 | -95.5 | -89.9 | -85.1 | | | | | | |
| Adjustment 2016 (accepted) 11),12) | -151.3 | -146.9 | -145.1 | -142.5 | -128.1 | | | | | |
| Adjustment 2017 (accepted) 13) | -151.3 | -146.8 | -145.0 | -142.4 | -127.2 | -100.9 | | | | |
| Adjustment 2018 (accepted) 14),15) | -172.3 | -174.5 | -177.4 | -180.4 | -171.5 | -148.9 | -123.2 | | | |
| Adjustment 2019 (accepted) 16),17) | -172.3 | -174.5 | -177.4 | -180.3 | -171.4 | -148.8 | -123.3 | -93.7 | | |
| Adjustment 2020 (accepted) 18) | -297.8 | -302.3 | -301.3 | -306.1 | -294.5 | -269.0 | -244.3 | -214.9 | -174.6 | |
| Adjustment 2021 (proposal) | -296.1 | -300.7 | -300.4 | -305.2 | -294.9 | -274.9 | -250.9 | -221.1 | -179.6 | -144.8 |
| Change against Adjustment 2020 | 1.7 | 1.6 | 0.9 | 0.9 | -0.4 | -5.9 | -6.6 | -6.2 | -5.0 | |

The noticeable differences between the 2017 and 2018 adjustment proposals resulted from an ad-hoc revision of the *Handbook Emission Factors for Road Transport* (HBEFA, version 3.3) in the aftermath of the so-called "Diesel-gate". ¹⁹⁾

The even bigger changes between adjustment 2019 and adjustment proposal 2020 result from an additional rather fundamental revision of of the *Handbook Emission Factors for Road Transport* now available in version 4.1 20 strongly effecting the TREMOD model underlying Germany's emission reporting for road transport and hence any adjustments of NO_x emissions. With such major model revision between submissions 2019 and 2020, the 2020 adjustment proposal differed significantly from the adjustment applied for and accepted in 2019.

In comparison to 2020, the TREMOD model applied for the 2021 submission has been revised only slightly in terms of NO_x emission factors, taking into account results from ongoing measurement campaigns especially for EURO 6 vehicles. Hence, the 2021 adjustment proposal differs only slightly from the (accepted) proposal provided with submission 2020.

¹⁾ IIASA, 1999: Amann, M.; Bertok, I.; Cofala, J.; Gyarfas, F.; Heyes, Chr.; Klimont, Zb.; Syri, S.; Schöpp, W.: Further analysis of scenario results obtained with the RAINS model - Interim Report to the Ministère de L'Aménagement du Territoire et de l'Environment Direction de la Prévention des Pollutions et des Risques 20, avenue de Ségur75302 Paris 07 SP, April 1999 – URL: https://iiasa.ac.at/web/home/research

²⁾ EB, 2012a: CLRTAP EB Decision 2012/3, ECE/EB.AIR/111/Add.1: Adjustments under the Gothenburg Protocol to emission reduction commitments or to inventories for the purposes of comparing total national emissions with them URL: http://www.unece.org/fileadmin/DAM/env/documents/2013/air/ECE EB.AIR 111 Add.1 ENG DECISION 3.pdf

³⁾ EB, 2012c: CLRTAP EB Decision 2012/12: Guidance for adjustments under the 1999 Protocol to Abate Acidification, Eutrophication and Ground-level Ozone to emission reduction commitments or to inventories for the purposes of comparing total national emissions with them URL: http://www.unece.org/fileadmin/DAM/env/documents/2012/EB/Decision_2012_12.pdf
4) EB, 2012b: CLRTAP EB Decision 2012/4: Provisional Application of Amendment to the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone URL:

http://www.unece.org/fileadmin/DAM/env/documents/2013/air/ECE_EB.AIR_111_Add.1__ENG_DECISION_4.pdf

⁵⁾ ifeu, 2002: Final report to UFOPLAN study FKZ 201 45 112 (German version only): Aktualisierung des Daten- und Rechenmodells: Energieverbrauch und Schadstoffemissionen des motorisierten Verkehrs in Deutschland 1980-2020; Im Auftrag des Umweltbundesamtes; ifeu Institut für Energie- und Umweltforschung Heidelberg GmbH (Institute for Energy and Environmental Research), Wilckensstraße 3, D-69120 Heidelberg, Germany, phone: +49 (0) 6221 / 47 67 -0, fax: +49 (0) 6221 / 47 67 -19, Heidelberg, 31. Oktober 2002

⁶⁾ Knörr et al. (2020a): Knörr, W., Heidt, C., Gores, S., & Bergk, F.: ifeu Institute for Energy and Environmental Research (Institut für Energie- und Umweltforschung Heidelberg gGmbH, ifeu): Fortschreibung des Daten- und Rechenmodells: Energieverbrauch und Schadstoffemissionen des motorisierten Verkehrs in Deutschland 1960-2035, sowie TREMOD, im Auftrag des Umweltbundesamtes, Heidelberg & Berlin, 2020.

[&]quot;CEIP, 2014a: Centre on Emission Inventories and Projections (CEIP): CEIP/Adjustment RR/2014/GERMANY: Review of the 2014 Adjustment Application by Germany, URL:

https://webdab01.umweltbundesamt.at/download/adjustments2014/Adjustment_Review_Report_GERMANY_2014.pdf?cgiprox y skip=1, 5 August 2014.

⁹⁾ CEIP, 2015a: Centre on Emission Inventories and Projections (CEIP): CEIP/Adjustment RR/2015/Germany: Review of the 2015 Adjustment Application by Germany, URL:

https://webdab01.umweltbundesamt.at/download/adjustments2015/Germany2015-adj.pdf?cgiproxy_skip=1, September 2015.

¹⁰⁾ CEIP, 2015b: Centre on Emission Inventories and Projections (CEIP): CE/EB.AIR/GE.1/2015/10-ECE/EB.AIR/WG.1/2015/13: Review of adjustment applications 2015; URL:

http://www.ceip.at/fileadmin/inhalte/emep/Adjustments/ece.eb.air.ge.1.2015.10_ece.eb.air.wg.1.2015.13.AV.pdf, 6 July 2015.

¹¹⁾ CEIP, 2016a: Centre on Emission Inventories and Projections (CEIP): Review of the 2016 Adjustment Application by

adjustment de-a

Germany, URL: https://webdab01.umweltbundesamt.at/download/adjustments2016/Germany2016-adj.pdf?cgiproxy_skip=1, 2016

¹²⁾ CEIP, 2016b: Centre on Emission Inventories and Projections (CEIP): ECE/EB.AIR/GE.1/2016/10-ECE/EB.AIR/WG.1/2016/18: Review of adjustment applications 2016: URL:

http://www.ceip.at/fileadmin/inhalte/emep/pdf/2016/ECE EB.AIR GE.1 2016 10 E.pdf, 2016.

¹³⁾ CEIP, 2017a: Centre on Emission Inventories and Projections (CEIP): ECE/EB.AIR/GE.1/2017/10-ECE/EB.AIR/WG.1/2017/20: Review of adjustment applications 2017; URL:

http://www.ceip.at/fileadmin/inhalte/emep/pdf/2017/Advance ece eb air ge 1 2017 10 ece eb air wg 1 2017.pdf, 2017.

¹⁴⁾ CEIP, 2018a: ECE/EB.AIR/GE.1/2018/10-ECE/EB.AIR/WG.1/2018/21: Review of adjustment applications 2018; URL: https://www.ceip.at/fileadmin/inhalte/emep/pdf/2018/ADJ ece.eb.air.ge.1.2018.10-ece.eb.air.wg.1.2018.21 advance.pdf,

15) CEIP. 2018b:

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