31.12.2022

Final report on implementation of the action: IMPROVING THE ALLOCATION OF ROAD TRANSPORT EMISSIONS IN AEA MODULE AND COHERENCE BETWEEN AEA AND PEFA MODULES

GRANT AGREEMENT NO. 101022801 — 2020-SK-ENVACC

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FINAL REPORT ON IMPLEMENTATION OF THE ACTION:

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1. INTRODUCTION

Air protection is one of the important pillars of European environmental legislation. Air pollution is a major environmental risk to health; it causes respiratory problems and other diseases and affects well-being and quality of life. Lost working days or high costs of health care are also attributed to the consequences of low air quality.

Transport is a significant source of greenhouse gases and pollutants. Despite the improving efficiency of vehicle engines in the last decade, road transport, in particular, is a significant source of carbon dioxide (CO_2), nitrogen oxides (NO_X), carbon monoxide (CO), particulate matter (PM) and copper emissions.

The overall increase in the demand for transportation performance to people and goods, and the insufficient fulfilment and control of the determined emission standards in the past, led to the failure to fulfil the assumptions toward the goal of reducing emissions. A good example is the average NO_X emissions from diesel engines of the EURO 5 emission standard when tested in real operation. Here, the emissions were approximately at the same level as the previous technologies set by the older standards and in places even exceeded the limits given by the standards before the Euro standard. Thus, these emissions were not reduced much, which means that the reduction was not as high as expected. The interest of the Slovak Republic, as a member of the European Union with a common direction in the area of air protection policy, is to improve air quality, prevent premature deaths and various respiratory diseases and reduce the emissions of pollutants annually released into the air, including emissions from transport.

The project aimed to bring more accurate and precise allocation of road transport fuel emissions according to the economic activities and households in Slovakia. There is proof of changes in the Slovak economy due to higher productivity and advance in technological development. Information provided in the AEA and PEFA tables helps to focus supporting and donation mechanisms more appropriate to higher value-added activities and economic sectors and turn down the activities with a lower value-added and negative impact on the environment.

2. PROJECT BACKGROUND

On July 6th, 2011, Regulation (EU) No 691/2011 of the European Parliament and the Council on European Environmental Economic Accounts was adopted, encompassing three modules: Air Emission Accounts (AEA), Environmentally Related Taxes by Economic Activity (ETEA) and Economy-Wide Material Flow Accounts (EW-MFA). On April 16th, 2014, Regulation (EU) No 538/2014 amended Regulation (EU) No 691/2011 with three new modules: Environmental Protection Expenditure Accounts (EPEA), Environmental Goods and Services Sector Accounts (EGSS), Physical Energy Flow Accounts (PEFA).

Improving the methodology for allocating emissions from road transport has a significant impact on the quality of air emissions inventory and accounts reporting (AEA) under the EC and respective EU legislation. Emissions from road transport, when allocated into the NACE rev.2 categories, make it possible to analyse which NACE rev.2 categories emit the largest share of emissions into the atmosphere. This could improve the knowledge and target policies on the relevant economic sectors at the Slovak level as well as at the EU level.

On the other hand, PEFA record energy flows from the environment to the economy (natural inputs), within the economy (products) and from the economy back to the environment (residues). PEFA enables integrated analyses of environmental, energy and economic issues.

The Department of Emissions and Biofuels (OEaB) is responsible on the national level, for compiling and reporting the AEA accounts (emissions) to the EUROSTAT and is interested in the continual improvement of the AEA reporting; mostly focusing on the activities for extending the scope beyond what is required by the regulation, methodological developments and enhancing the quality of provided data. These goals were declared and fulfilled during two previous completed grant projects, which were successfully delivered in the previous years. In 2016, the working group on Environmental Accounts (WG) emphasized the need to improve methodology in the area of allocation of road transport emissions and energy use to NACE rev.2/household categories. A road map for improvement was agreed upon. In May 2017, the WG endorsed the classification of methodological elements developed by the Task Force and the timing of the next steps:

(i) Countries should complete the inventory of methods by end of July 2018.

(ii) Countries should provide self-assessments by end of October 2018.

The self-assessment process of Slovakia undergone in 2018, identified insufficiencies in the current national methodology of road transport reporting in the AEA. These lower quality elements are connected with the allocation of road transport based on employment rate or gross value added to the NACE rev.2/household categories and secondly with the issue of allocation of some types of vehicles (motorcycles) to the NACE 49 category.

These issues were the results of a lack of or missing data/information and sources on the usage of company vehicles (vehicles used for business) in Slovakia. Both identified elements have a common issue and are interlinked. Slovakia prepared the National Action Plan (NAP) for improving the quality of the reporting. It is necessary to implement the NAP by the end of 2022.

Therefore, the main aim of this grant project was to support the successful implementation of the NAP. The current grant project is directly built on the previously successfully delivered

outcomes of grant projects in the area of the AEA for Slovakia. The objective of this grant project was to further improve the quality, accuracy, coherency and time series consistency of AEA data reported under Regulation (EU) No 691/2011 as amended.

3. DESCRIPTION OF THE ACTION

3.1 Objectives of the project

The grant project "*Improving the allocation of road transport emissions in AEA module and coherence between AEA and PEFA modules*" (hereinafter "project") financed by Eurostat had two main objectives, which were focused on tackling pending issues in statistical reporting for AEA and PEFA for the Slovak Republic.

The first objective was an improvement of the allocation of road transport emissions in the AEA module to NACE rev.2/household categories. The focus of this objective was the development of the methodology for assigning emissions from road transport to NACE rev.2/household categories. The application of the new method for allocation of data, which was obtained and processed within the project, was necessary to fulfil the obligations of the Slovak Republic arising from the NAP.

The second objective of the project was an improvement of data coherence between AEA and PEFA modules in road transport fuels. This objective was focusing on the improvement of the coherence between AEA and PEFA modules in a proper allocation of road transport fuels to NACE rev.2/household categories using results and methodology developed in the first objective of this project.

The Grant project started on February 1st, 2021 and is planned to end on January 31st 2023.

3.2 Project management

3.2.1 Institutions involved in the project

The execution of the action was done through the Mono-Beneficiary Grant Agreement (ESTAT MGA — Mono). The roles of the participating institution in the context of the project were the following:

The Slovak Hydrometeorological Institute (SHMÚ):

The experiences and knowledge built up during previous years and the successful completion of previous grant projects focusing on the AEA reporting improvements, enable the team of experts from the SHMÚ, Department of Emissions and Biofuels (OEaB) to attend the subsequent grant project supported by Eurostat. The actual grant was necessary to continue with the changes and improvements made in previous projects and enhance the quality of reporting in the transport sector. Transport, and especially road transport is one of the most dynamic and important sectors in economic, environmental and social areas.

The SHMÚ was in charge of ensuring coordination activities, specifically: the management of the project and coordination of all related activities, ensuring the scope and meeting of project objectives and the final deadlines, and arranging the coordination of working meetings and technical discussions and project team members.

The SHMÚ-OEaB also coordinated and provided the technical work via the internal and external specialists/experts under contract and ensured sharing of knowledge with the project team, monitoring conducted activities, monitoring project progress, communication and submission of the outputs to the Eurostat.

The SHMÚ-OEaB was further responsible for performing the professional activities in defined subtasks of individual working packages and elaboration of final documentation and dissemination of results.

3.2.2 Human resources for the project

The project team consisted of four experts from the SHMÚ-OEaB including the project leader, and four experts from different fields, who were actively involved in the working packages of the project.

Project leader and coordinator: **Zuzana Jonáček**

Air Emissions Expert at the SHMÚ-OEaB. Responsible for the management of the project, its execution and professional project activities.

The project team at the SHMÚ-OEaB:

The project team involved other three internal experts including two senior experts and a QAQC (quality assurance/quality control) expert, two administrative personnel from the Economic Division of the SHMÚ, and four external experts under contract for the project.

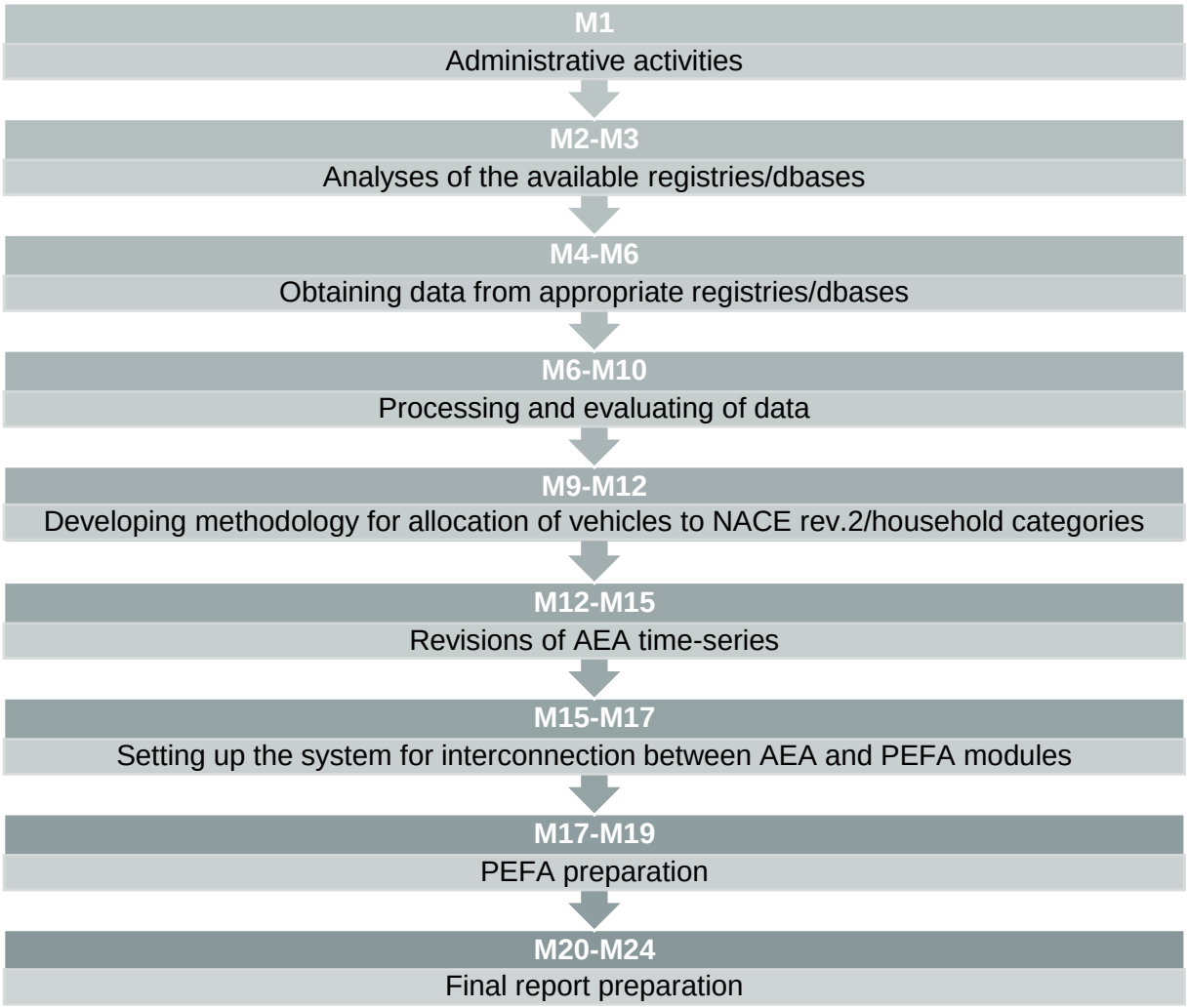
Time schedule of the project

The starting date of the project was 1st, February 2021. The project is scheduled to finish after 24 months, on 31st, January 2023. The planned duration of the project was followed.

The project was developed as one work package divided into nine phases with the defined specific content of the activities and time scale to fill the goals of the particular work objectives. ***Fig. 1*** presents the planned activities divided into nine phases in a graphic overview with a time scale.

Each phase resulted in one or more deliverables submitted to Eurostat within the deadlines. The overview is provided in related chapters A - Improving the allocation of road transport emissions in the AEA module to NACE rev. 2/household categories and B - Improving coherence between AEA and PEFA modules in road transport fuels. The final output documents are in the Annexes of this report.

Fig. 1: *Time schedule and Milestones of the Grant*



PART II: IMPLEMENTATION OF THE PROJECT

This chapter provides detailed information about conducted activities within the set objectives of the project. It is divided into two parts:

A. **Improving the allocation of road transport emissions in the AEA module to NACE rev. 2/household categories**

B. **Improving coherence between AEA and PEFA modules in road transport fuels**

Both identified elements have a common issue and are interlinked; therefore, they were processed within the same set of actions.

This division is in line with the objectives of the project. Each part provides information on a summary, initial conditions and details about the performed project phases and results.

4. METHODOLOGY FOR ALLOCATION OF ROAD TRANSPORT EMISSIONS INTO NACE REV.2 CATEGORIES

4.1 Data collection, analysis and processing

Based on an analysis of available sources, a prototype of a database system was developed and a Software Tool was programmed for the data store (warehouse) and processing (including verification steps).

In the first stage of the project, the Software Tool includes data from the following sources:

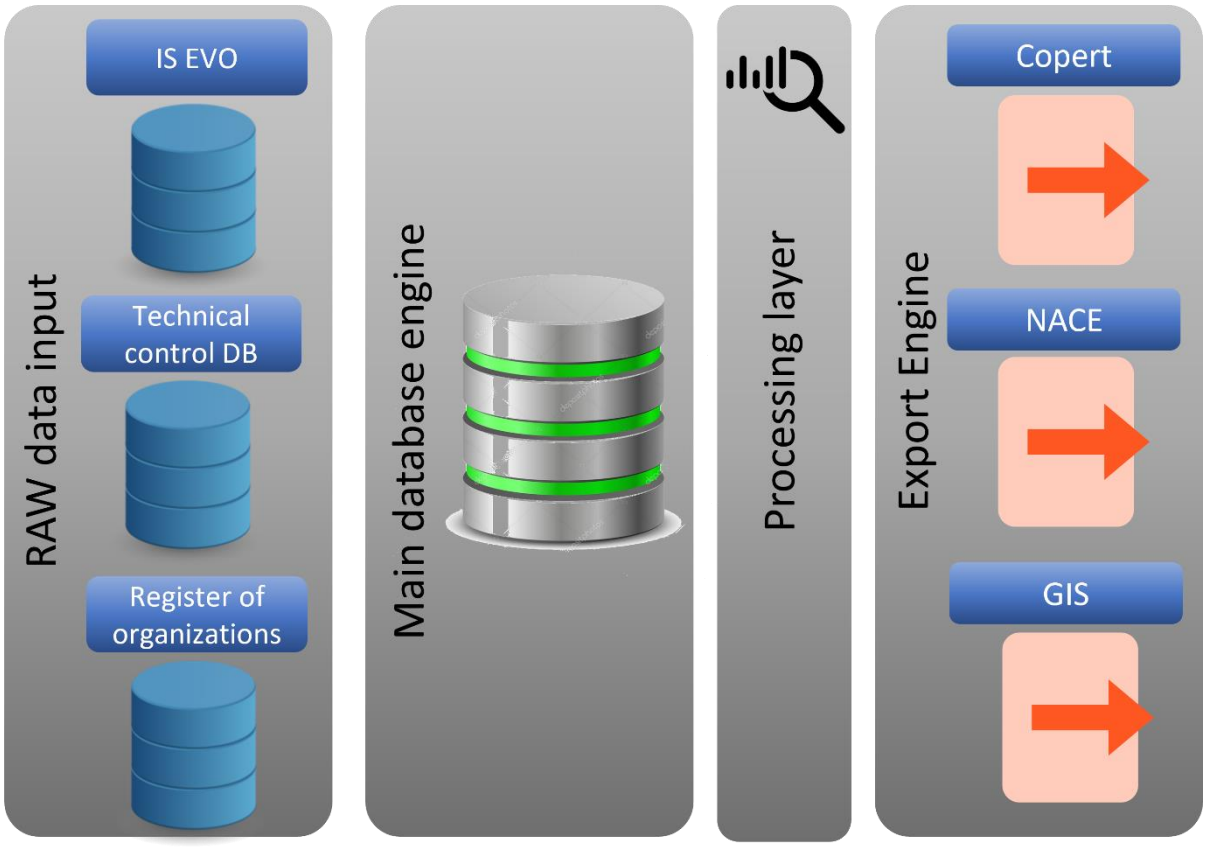
IS EVO (Vehicle Database)

Technical Inspection Database

Register of Organisations

These data sources provide raw data input for the database engine (depicted in ***Fig. 2***). The collection of available data from the sources mentioned above was a preliminary stage of the processing.

Fig. 2: *Simplified structure of prepared Software Tool*



4.1.1 IS EVO

IS EVO is a vehicle registration information system used for the collection, recording and storage of information about registered vehicles in the Slovak Republic. It collects information about the car owners, car registration numbers and other relevant data. The operator of the IS EVO is the Ministry of Interior of the Slovak Republic via the Central Body of State Administration. The most important information from the IS EVO used in the prepared tool is the VIN number, vehicle registration number, type of fuel, engine capacity, gross vehicle weight, the maximum combined weight and emission standards according to EU Directives, date of first registration and date of first registration in the Slovak Republic.

4.1.2 Technical Inspection Database

Technical Inspection Database is operated by the Ministry of Transport of the Slovak Republic. Information imported from this database into the prepared Software Tool is the VIN number, vehicle registration number, date of technical inspection, category of vehicle and total millage. Information about total mileage and the date of control is used for the estimation of the annual mileage of each individual vehicle. The VIN Number and Registration Number are used for linking (cross-checking) the data from the IS EVO and Technical Inspection Database.

During the processing of input data and cross-checks of data, some discrepancies were identified. These discrepancies probably arose during the manual entry of primary data into the databases. Therefore, in some cases, it was not possible to link data from the IS EVO and the Technical Inspection Database. Thus, several flexible tools (processes) were developed

to identify these discrepancies and correct information in both databases. These discrepancies were mostly missing VIN numbers, unrealistic dates of registration and too high yearly mileage. An error message was used for indicating discrepancies. They were afterwards manually corrected. The processing layer of the developed Software Tool is also responsible for the estimation of vehicle mileage.

For each vehicle, the information from technical inspections (periodicity of technical inspections is summarized in ***Tab. 1***) is collected and stored in a temporary list on the Technical Inspection Database. Based on generated pairs: the date of inspection – total mileage and approximate mileage at the beginning and end of the year are interpolated. The annual mileage of the car is estimated as the difference between the mileage at the beginning and end of the year/years.

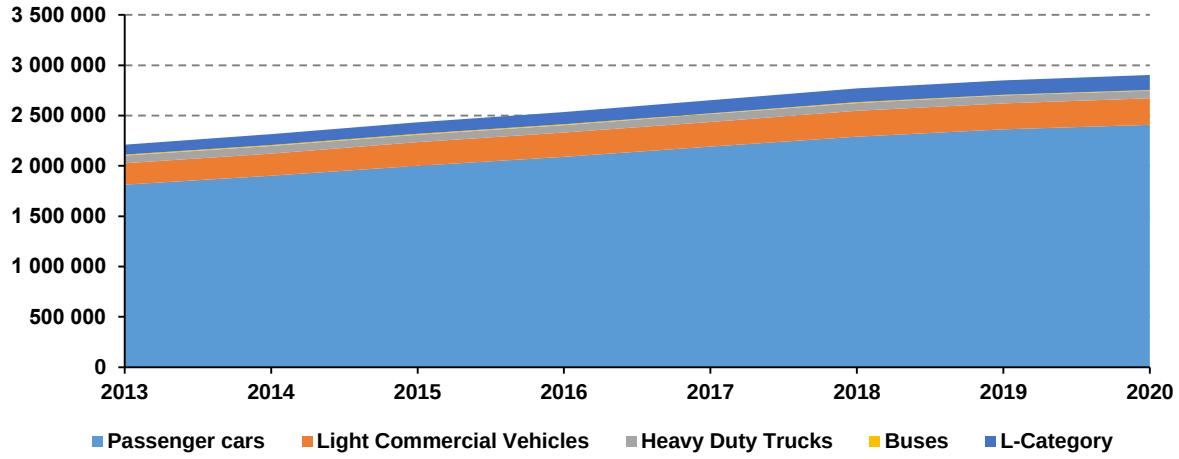
Tab. 1: *Vehicle types and categories and the periodicity of technical inspection according to Regulation of Ministry of Transport and Construction of the Slovak Republic No 265/1996 Coll. as amended*

Vehicle CATEGORY	Vehicle TYPE	Control after first registration	Periodical control
Passenger Vehicles (Cars)	M1	After 4 years	Every 2 years
Light Commercial Vehicles (Vans)	N1	After 4 years	Every 2 years
Heavy Duty Vehicles (Trucks)	N2 And N3	After 1 year	Every year
Buses	M2 And M3	After 1 year	Every year
Buses older than 8 years	M3	-	Every 6 Month
Mopeds, Motorcycles and ATVs	L3eA1, L4eA1	After 4 years	Every 4 years
	L3eA2, L3eA3, L4eA3, L5e, L6e And L7e	After 4 years	Every 2 years
	L1 up to 50 ccm and 45 km/h	-	-

To validate compiled data, it is important to perform a check of data consistency in time series of aggregated results. As an example of such a timeline, the next picture (***Fig. 3***) shows the total number of registered cars in the Slovak Republic, distinguished into five categories (based on the COPERT model system structure).

From ***Fig. 3*** it is clear, that the total number of registered vehicles has a growing trend. Passenger cars represent the largest share of the total number of vehicles. The year-on-year growth rate of passenger cars is at a level of 5%. The year 2020 is an exception, where the growth rate was below 2% (probably due to COVID-19). A very similar trend can be observed in the case of Light Commercial Vehicles and L-Category (mopeds, motorcycles, ATVs, and micro-cars). On the other hand, the total number of Heavy-Duty Trucks and Buses is practically constant (the year 2020 is an exception, where both categories decreased significantly).

Fig. 3: *Total number of registered vehicles (breakdown by vehicle type) since 2013*



Another very important piece of information for the inputs to the COPERT model system is fuel type. The next pictures show (***Fig. 4***) a comparison of the share of individual fuels used in passenger cars. Particular disaggregation of alternative fuels is provided in ***Fig.5***.

Fig. 4: *Share of fuel types in the Slovak Republic – Passenger Cars*

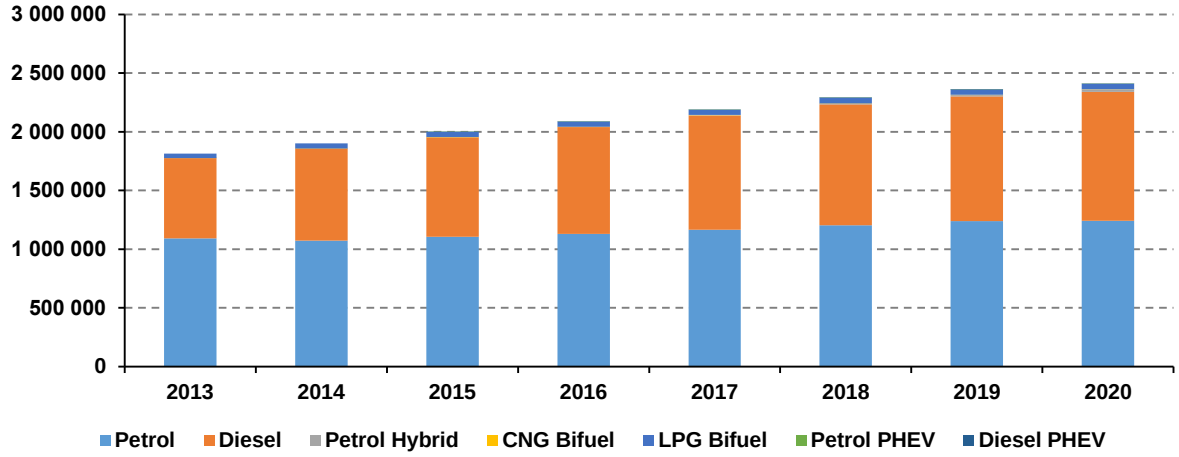
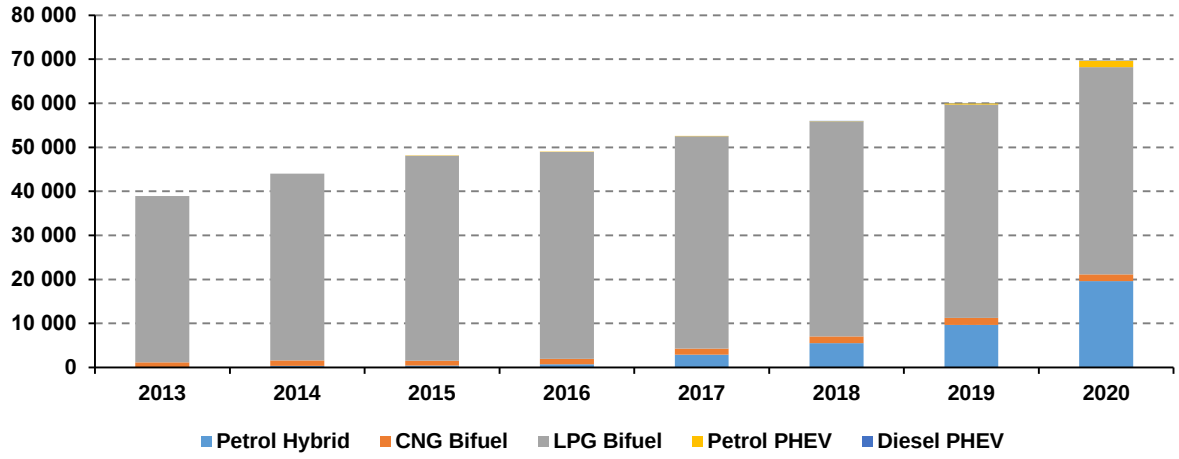


Fig.5: *Share of alternative fuels in the Slovak Republic – Passenger Cars*



The main trend, like in other EU countries, is that more than half of cars in the Slovak Republic use petrol as fuel. The dominance of petrol is continuously reduced by diesel. The diesel/petrol ratio was 38% in 2013 but the ratio increased to almost 47% in 2020. A positive trend is visible in the increase of alternative fuels. In the last five years, the increase in hybrid cars is practically exponential. There is also a significant increase in electric passenger cars in the last two years.

For a correct estimate of the non-CO_2 emissions, it is important to include information about European emission standards (EURO standards) on each vehicle. This information is also necessary for the COPERT model system. For illustration, the share of EURO standards of vehicles is depicted in ***Fig. 6-10***.

Fig. 6: *Share of EURO emissions standards in the Slovak Republic – Passenger Cars*

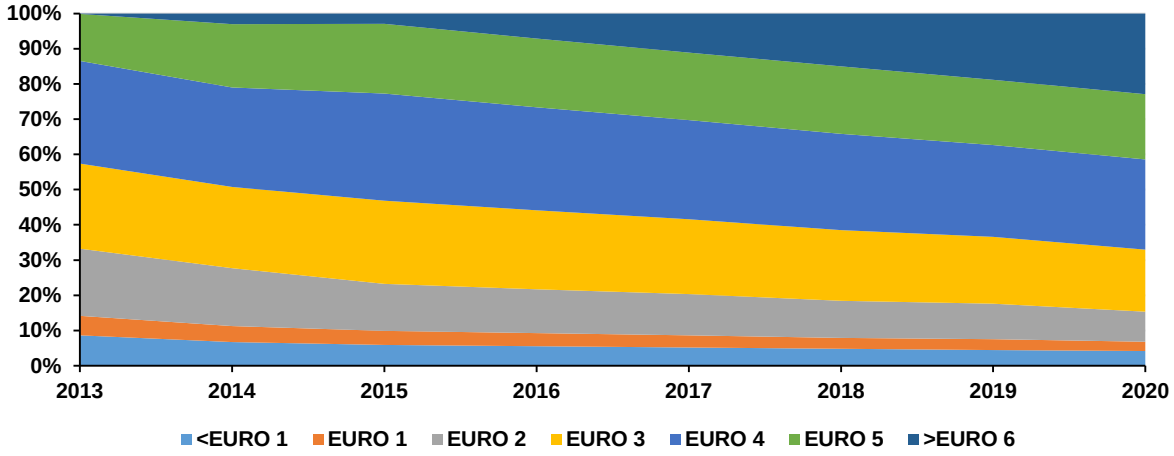


Fig. 7: *Share of EURO emissions standards in the Slovak Republic – Vans*

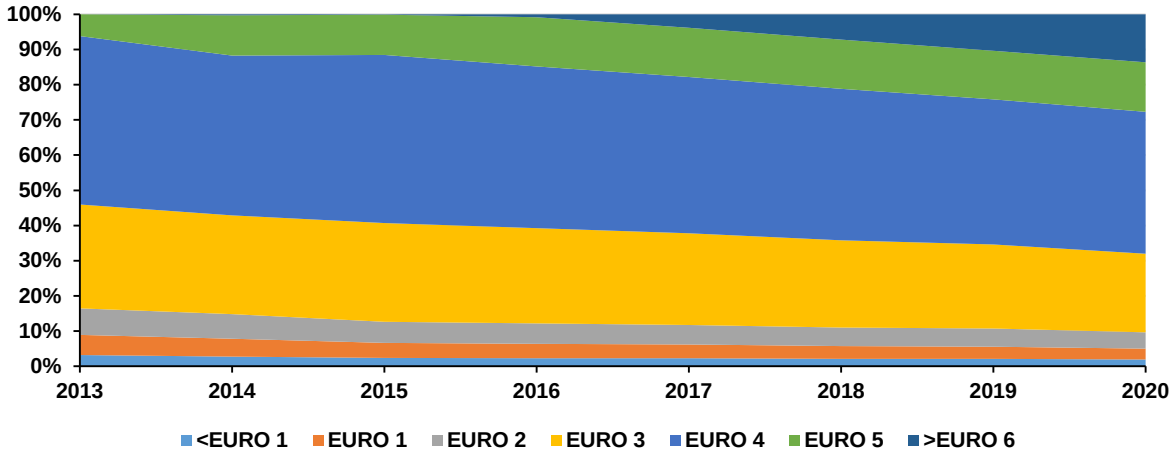


Fig. 8: *Share of EURO emissions standards in the Slovak Republic – Trucks*

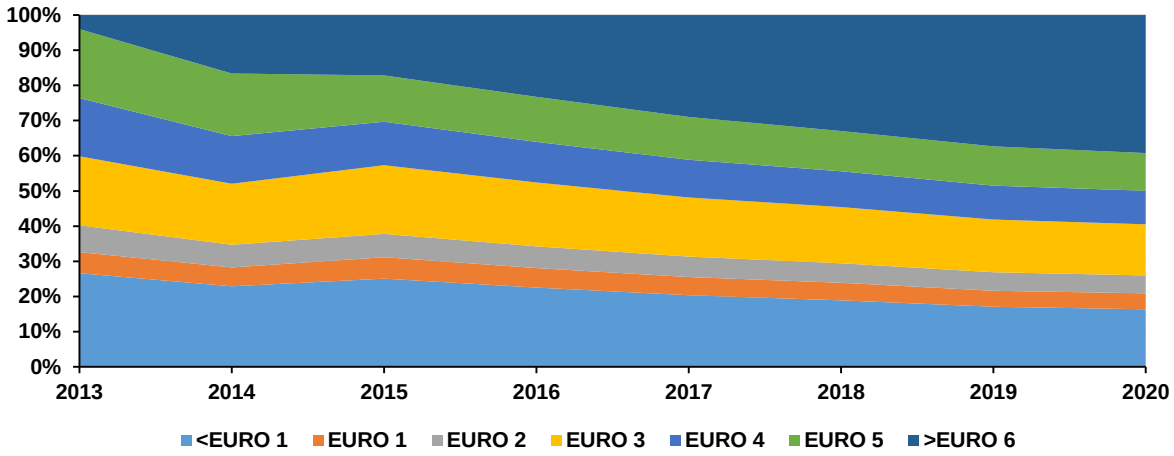


Fig. 9: *Share of EURO emissions standards in the Slovak Republic – Buses*

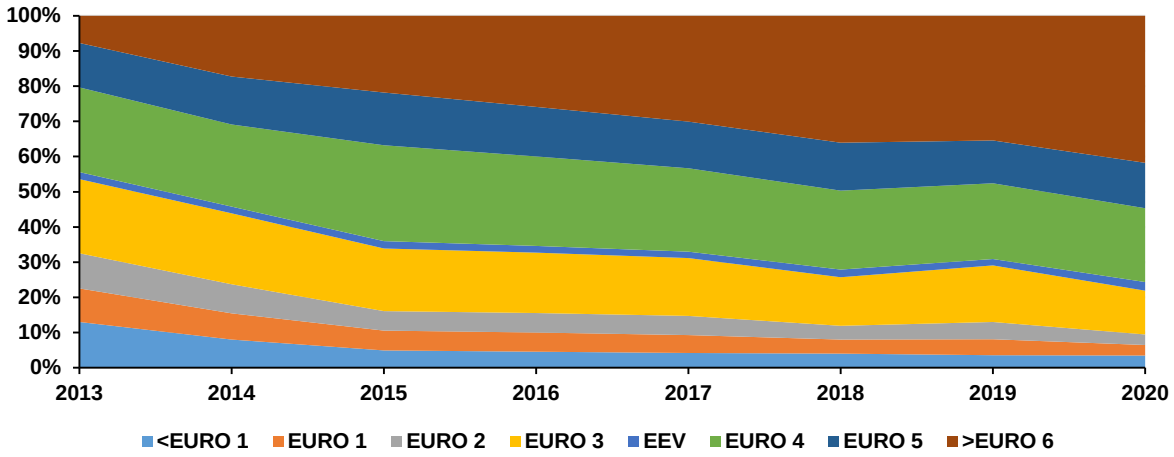


Fig. 10: *Share of EURO emissions standards in the Slovak Republic – Mopeds, Motorcycles and ATVs*

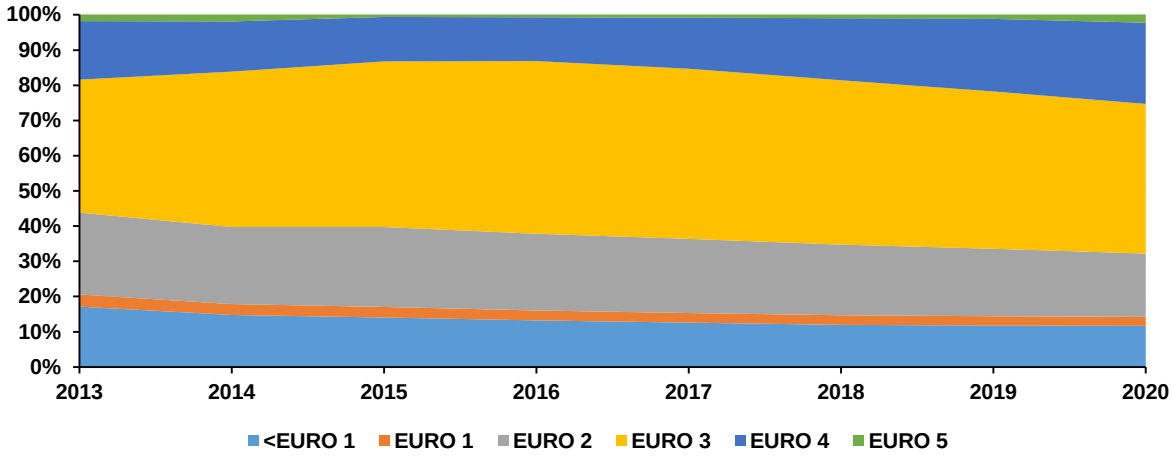


Fig. 6 depicted conventional, pre-ECE and ECE standards for passenger cars together in category <EURO 1. The EURO 6 covers all EURO 6 emissions standards (EURO 6 a/b/c, EURO 6d-Temp and EURO 6d). Trucks and buses (***Fig. 8*** and ***9***) have different markings of EURO standards, but for easier usage of the software, it is encoded the same way as for passenger cars except for EEV, which is a standalone emission standard.

There is a continual increase of cars with EURO 5 and all EURO 6 emissions standards. The share of cars with EURO 6 standards is almost 23% of all cars in 2020 (in the year 2013 it was less than 0.2%). The number of cars with EURO 4 standards remains practically constant in the period 2013-2020. The number of cars with emissions standards less than EURO 3 is continuously decreasing in the monitored period. The reduction in the number of cars in the EURO 3 category is 41% in comparison with the year 2013.

All information mentioned above is used as the background for the emissions estimation.

The export engine of the developed Software Tool is used for the preparation of the background information for vehicle analysis and to generate input data for other systems. As the primary objective of the prepared system is to estimate emissions in transport, the main exporting format is the input file of the COPERT model.

4.1.3 Register of Organisations

The Statistical Office of the Slovak Republic is providing to the Slovak Hydrometeorological Institute, particularly to the OEaB on a regular basis (annually) the complete Register of the Organisation. The information from Register is used for the AEA compilation.

4.2 COPERT model and emissions estimation

The COPERT model is software for GHG emissions and air pollutants estimation in road transport calculation. It is partly financed by the European Environment Agency (EEA), in the framework of the activities of the European Topic Centre on Air and Climate Change. It contains default emission factors and emissions for all major pollutants, heavy metals, and particulate matter. The COPERT model requires inputs about vehicle type, vehicle segment, fuel used and EURO emission standards. For each combination of these four parameters, it is necessary to estimate the number of cars (STOCK), annual mileage (MEAN_ACTIVITY) and lifetime millage (LIFETIME_CUMULATIVE_ACTIVITY). These data are prepared and processed by the processing layer and compiled by the Export engine of the prepared Software Tool (***Fig. 2***).

The model distinguishes vehicle categories and default emission factors reflecting the recent development and research. Emission factors (EFs) are then modified for each country based on particular variables. The methodology is often referred to by the name of the program (methodology “COPERT”). The model is based on the fuels approach, which is used for the estimation of CO_2 emissions. The fuel consumption and other variables such as H/C and O/C ratio and carbon content in fuels is used in this approach. Also, country-specific H/C ratios and NCVs are used in model calculation. Slovakia is analysing the composition of fuels sold by most companies on the market, representing 3 different regional refineries on regular basis (Orlen Unipetrol from Czechia, OMV from Austria and Slovnaft from Slovakia). Delivering updated and most recent data on fuels’ composition is crucial for correct country-specific EFs

estimation. The H/C and O/C ratio of the fuels is regularly analysed by the Research Institute for Crude Oil and Hydrocarbon Gases (VÚRUP) operating certified laboratories.

The COPERT model works with five basic vehicle categories and 375 subcategories. Further disaggregation was applied according to the operation of road vehicles in the agglomeration, road, and highway traffic modes. In the COPERT model, buses were divided into two subcategories (urban and coaches) and seven weight categories. Heavy-duty vehicles are divided into two basic categories (rigid and articulated). Rigid vehicles are further divided by weight into eight and articulated into six subcategories. EMEP/EEA methodology used technical parameters of different vehicle types and country-specific characteristics, such as the composition of the car fleet, the age, operation and fuels or climate conditions.

In conclusion, the model estimates country-specific emissions from the following input data:

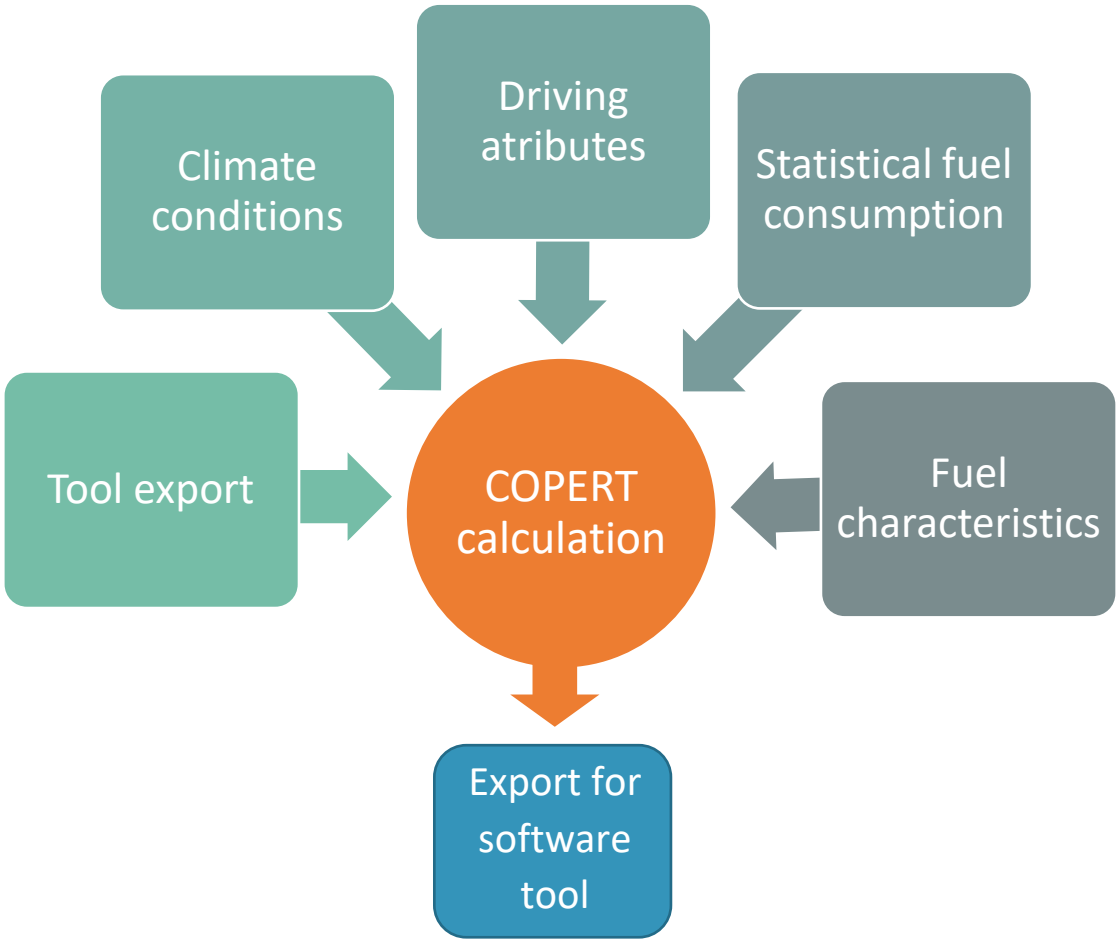
- total fuel consumption,
- composition of vehicles fleet,
- driving mode,
- driving speed,
- emission factors,
- annual mileage.

The EFs for CH_4, N_2O and most of the air pollutants in the COPERT model are defined separately for the different types of fuels, types of vehicles, different technological levels of vehicles, driving modes and seasons as these emissions are dependent on ambient and vehicle temperature. EFs are then calculated automatically by the model, based on the input parameters such as the average speed, the quality of fuels, the age of vehicles, the weight of vehicles and the volume of cylinders.

The average annual mileages including consistency with fuel consumption were also used for identifying the distribution of vehicles to their respective COPERT category. The Traffic Census of Slovakia conducted every five years in the period 2000- 2015, was the main source for intensity on urban, rural and highways.

More information on COPERT model structure is provided in ***Fig. 11***.

Fig. 11: *Scheme of the COPERT model inputs and outputs*



5. EMISSIONS MATRIX PREPARATION (AEA MODULE)

As mentioned, one of the project tasks was to distribute the estimated emissions to NACE rev.2 categories/households by applying a new, enhanced method. The first part of this task was done on the database layer of the prepared Software Tool (see **Chapter 4.1**, ***Fig. 2***).

The aim of the first step was to separate individual vehicles and allocate them to the households sector or economic activities. The allocation and distribution key was based on the cross-checking data available in the IS EVO and the Register of Organisations. The IS EVO contains information about company registration numbers for individual vehicles used for economic activities. The database layer of the Software Tool used information exported from the Register of Organisations. From this register, a combination of the identification number and main economic activity (main NACE) of the owner of the vehicle - the company is used for allocating the individual vehicle to the respective NACE rev.2 category. The export engine of the Software Tool can generate an allocation (distribution) matrix where rows represent vehicle categories and subcategories identified by the COPERT model (i.e., a combination of vehicle type, vehicle segment and fuels). The columns of the allocation matrix are NACE rev.2 classification codes. Individual matrix elements represent the number of vehicles in the corresponding category.

The second step of the matrix preparation was based on the emission outcomes of the COPERT model. The results from the model are structured in the same way that was needed to feed the matrix from the Software Tool (this was prepared to be in line with this structure). To establish a definitive matrix combination two separate calculations had to be made. Data from the first part of the process (number of vehicles in each NACE rev.2 category), data from the second part of the process (number of annual mileages and emissions) for passenger vehicles (PC), buses and mopeds, motorcycles and ATVs (L-category) and tonne-kilometres for light commercial vehicles (LCV) and heavy-duty vehicles (HDV) were needed to combine. By dividing the total mileage for each vehicle category and fuel, a ratio was obtained:

$$KM_x \div V_x = km_x \ (eq.1)$$

$$km_x \times V_{NACE} = km_{NACE} \ (eq.2)$$

$$km_{NACE} \div KM_x = R_P \ (eq.3)$$

Where:

KMx – total mileage in the designated vehicle and fuel category

Vx – total vehicles in designated category and fuel

kmx – average km of a vehicle in designated category and fuel

VNACE – vehicles of designated category and fuel in NACE rev.2 category

kmNACE – total mileage of the NACE rev.2 category for each vehicle category and fuel

Rp – ratio for PC and L-category matrix

This ratio was afterwards added to the matrix from the first step. After the combination of these two steps, a matrix for PC and L-category was obtained. For LCV and HDV a second calculation was made, as the weight of transported goods has to be also calculated. For calculating the weight, data on tonne-kilometres, provided by the Statistical Office of the Slovak Republic, were included:

$$V_{NACE} \div V_x = R_y \ (eq.4)$$

$$M_{NACE} \div M_x = R_{NACE} \ (\text{eq.}5)$$

$$R_{NACE} \div R_y = R_l \ (\text{eq.}6)$$

VNACE – total number of vehicles designated to NACE rev.2 category (LCV or HDV and fuel type)

Vx – total vehicles in designated category and fuel

MNACE – tonne-kilometres in designated NACE rev.2 category

Mx – total tonne-kilometres

kmNACE – total mileage of the NACE rev.2 category for each vehicle category and fuel

Ry – ratio of vehicles in designated NACE rev.2 category or households

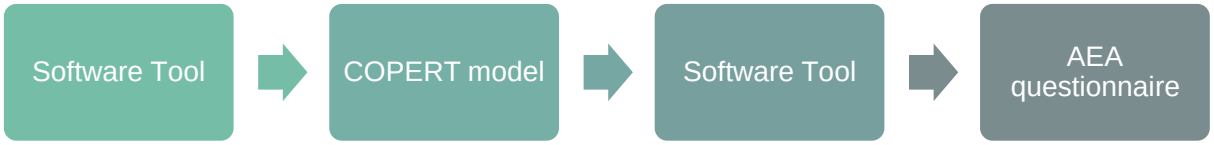
RNACE – ratio of tonne-kilometres in designated NACE rev.2 category

Rl – ratio for LCV and HDV matrix.

As it is not possible to distinguish, whether the goods were transported with LCV or HDV, the same ratio was used in all vehicle subcategories, fuels and euro standards.

The generated matrix contains in rows the ratio of emissions from each economic activity (NACE rev.2 categories) or households and each column represents a vehicle category with a specific fuel and emission standard. So, it contains the detailed structure of the vehicle fleet for a particular year, as well as the detailed disaggregated information for each NACE rev.2 category. This matrix is a part of the Software Tool and after feeding the software with estimated individual GHG emissions and air pollutants, the result can be exported to the EUROSTAT AEA questionnaire (***Fig. 12***).

Fig. 12: *Scheme of all processes for the AEA questionnaire preparation*



6. ENERGY MATRIX PREPARATION (PEFA MODULE)

The calculation of the matrix for the PEFA module is based on a similar approach as for the AEA module, using the same equations (*eq. 1-6)*. The difference is in the aggregation of data. The AEA module needs dis-aggregation to the level of emission standards, whereas the PEFA module needs only to the level of vehicle subcategory. This sub-category is defined by engine volume for passenger vehicles, motorcycles, mopeds, ATVs and micro-cars, and by the total weight of the vehicle for light commercial vehicles (up to 7.5 tonnes), heavy-duty vehicles (over 7.5 tonnes) and buses.

Data on fuels are obtained from the COPERT model. The model distinguishes also different types of biofuels. These are also inserted into the software separately but are summed up in output as needed in the PEFA questionnaire. The only fuel that for now is not included in the calculations is electricity. Electricity is not included since it does not produce direct emissions and the used COPERT model version doesn't contain this type of fuel. It is planned to upgrade the COPERT model in a way so it can calculate and disaggregate also this fuel.

7. RESULTS AND CONCLUSIONS INCLUDING IMPACT ON DISAGGREGATION OF EMISSIONS FROM ROAD TRANSPORT

The previously used allocation methodology of road transport emissions was based on expert judgment and connected directly to gross value added (GVA) and thus to economic parameters. The most significant and biggest NACE rev.2 categories was category H (Transportation and Storage).

By using the new enhanced methodology, emissions from road transport are no longer allocated according to gross value added. This means that with the help of the new methodology it was possible to ensure the fulfilment of the obligation of the Slovak Republic,

to improve reporting for two low-quality elements, that were identified in the self-evaluation of the national methodology for road transport emissions, in 2018. Cross-connection of different databases (vehicle database – IS EVO, Register of organizations, the database of technical inspection – STK) helped to identify the means and extent of use of each vehicle.

7.1 Results of the changes in the AEA module

The change in the allocation of emissions (GHG and air pollutants) resulting from applying the new methodology is significant. For example, the emissions for households increased significantly (***Tab. AI.1*** and ***Fig. 13, 14, 15***). This increase is mainly connected to the exclusion of gross value added from the allocation matrix for emissions, which is now based only on exact data and numbers of used and registered vehicles for economic activities within NACE rev.2 or households. The increase in emissions of households is also caused by the addition of a large number of buses and their emissions to households. This is due to the fact that the buses do not have assigned company registration numbers in the IS EVO database, and therefore it is not possible to allocate them correctly to NACE rev.2. This issue should be addressed in the next steps for improvement of methodology. Also, a significant increase was recorded in category G (Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles).

The new methodology breaks down emissions in more detail and provides better accuracy using the various databases that have been acquired to achieve the targets. In addition, it is fully consistent with the methodological approach used in the National Inventory Report for GHG emissions and Informative Inventory Report for air pollutants in the energy and industry sectors. Individual vehicles are assigned with the same approach (according to the individual classification of NACE rev.2) as pollution sources (operators) in energy or industry sectors.

In addition to significant changes for households and category H (Transportation and Storage) (***Fig. 13, 14, 15***), there were also significant changes in emissions in NACE rev.2 categories C (Manufacturing) and G (Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles). In the case of manufacturing, there was a significant (up to fourfold) reduction in emissions. The initially high share of allocated emissions in this category was caused by the high share of industrial production in the total gross value added. By exclusion of GVA to allocate emissions into NACE rev. 2 categories, there was a shift and transfer of emissions to other economic activities (e.g. NACE G) or households.

Fig. 13: *Change of CO_2 emissions allocated to the most significant NACE rev.2 categories C and G, H and HH (between AEA report 2021 and 2022)*

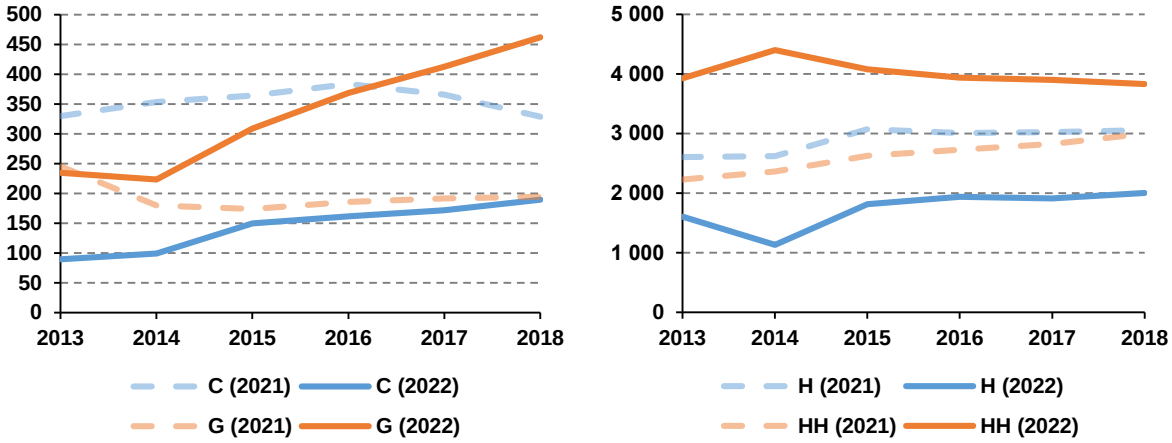


Fig. 14: *Change of NO_x emissions allocated to the most significant NACE rev.2 categories C and G, H and HH (between AEA report 2021 and 2022)*

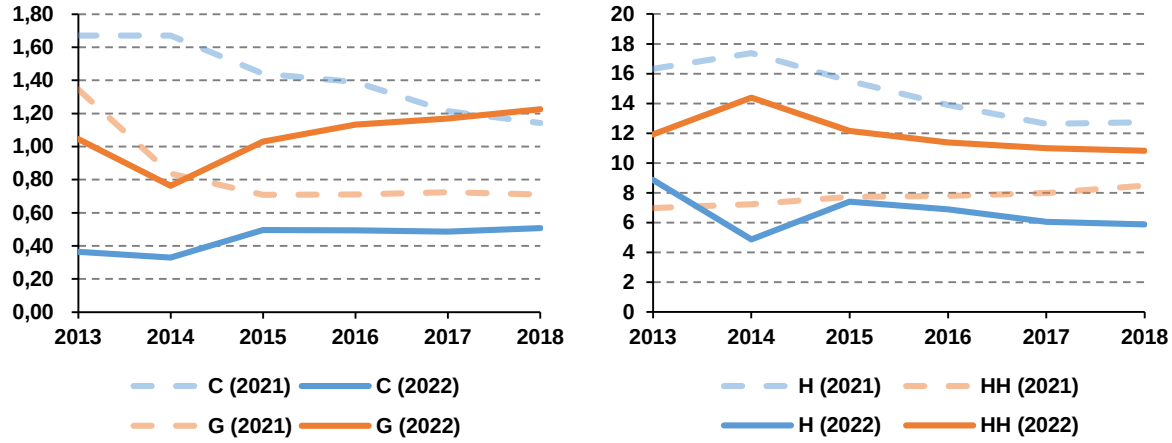
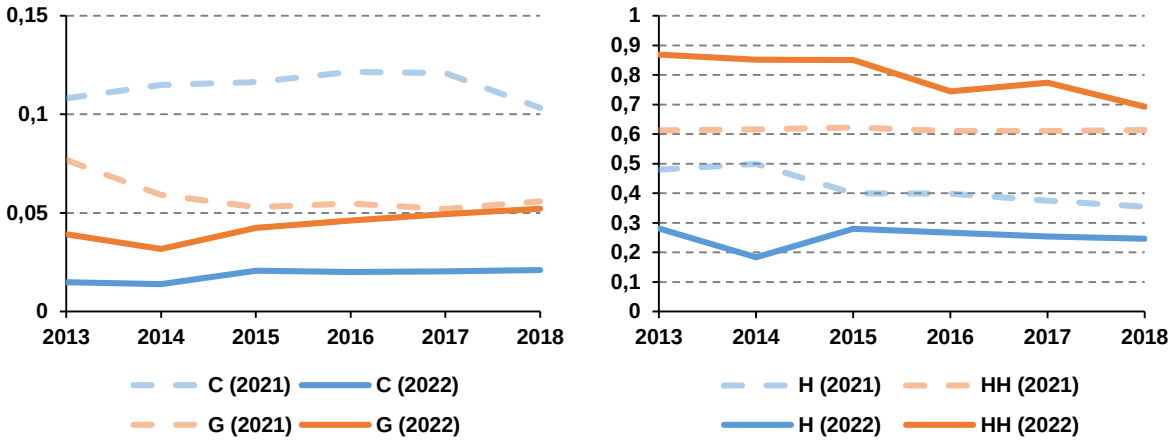


Fig. 15: *Change of $PM_{2.5}$ emissions allocated to the most significant NACE rev.2 categories C and G, H and HH (between AEA report 2021 and 2022)*



The differences between the old and new methodology of allocation are presented and summarised in **Annex I, *Tab. AI.1***. The resulting change in allocations of reported emissions is significant. Emissions assigned for the households' transport increased significantly. The

most significant decrease was recorded for NACE rev.2 category H, due to the disaggregation of the emissions into various NACE rev.2 categories.

7.2 Results of the changes in the PEFA module

The second part of the project was the preparation of a national methodology for the PEFA module, as regards the fuels used in road transport, as there was no available national methodology for this part of PEFA and only the EUROSTAT PEFA Builder was used. The methodology is comparable to the AEA module but has a different aggregation level, thus there is a different key for the allocation of the energy used in each NACE rev.2 category.

The result of the new PEFA methodology allows for seeing physical energy flows in road transport separately from other sectors. The new distribution of fuels not only allows us to see separately the allocation and use of gasoline and diesel in economic activities but also does an insight into probable changes in the national economy itself.

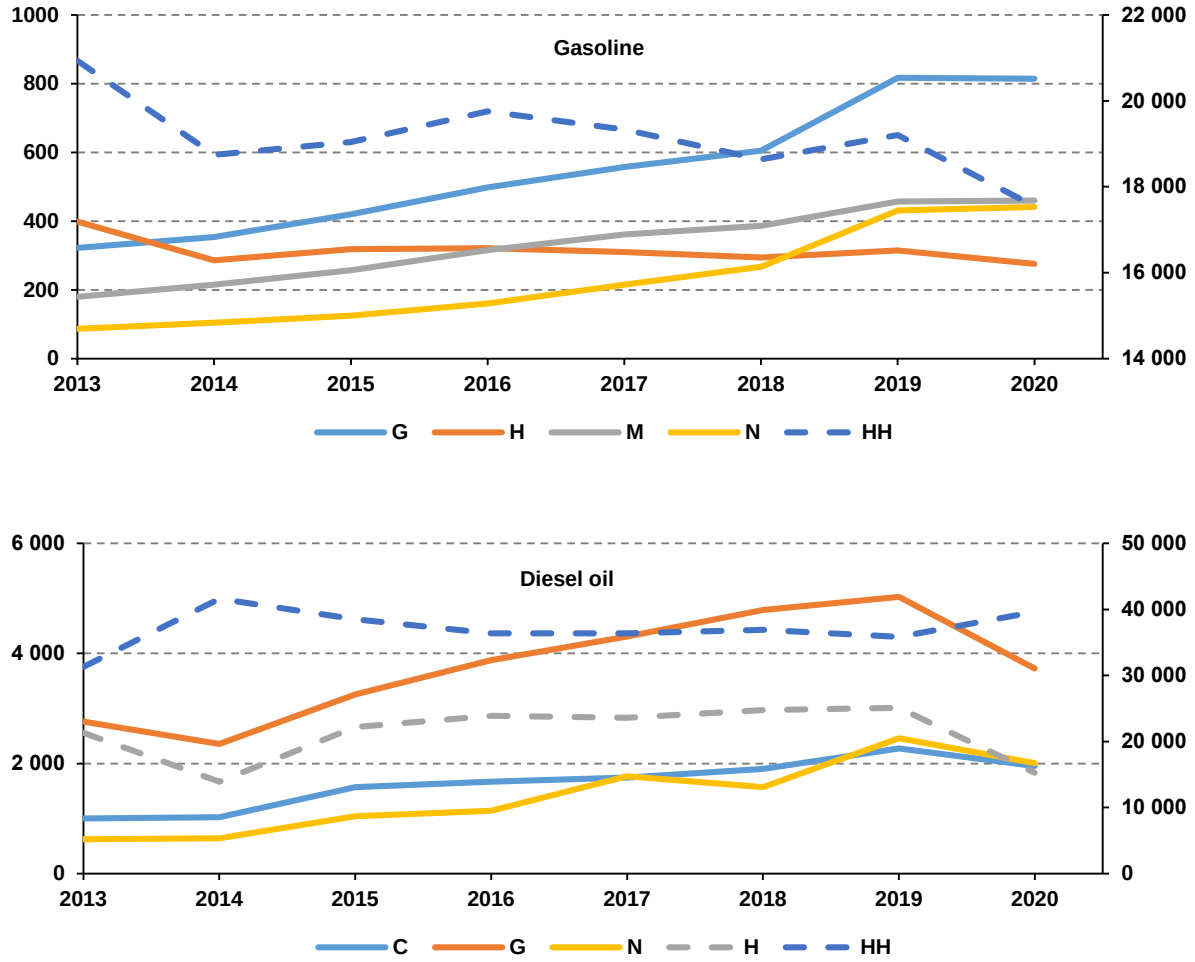
According to the new methodology, in 2013, there were the largest consumers of gasoline in NACE categories G, H and M (Professional, Scientific and Technical Activities) and together they used 54% of the total amount of gasoline in NACE rev.2 categories. Since 2019, NACE category N (Administrative and Support Services Activities) exceeds in consumption of gasoline the category H. In 2020, the three categories with the highest gasoline consumption (G, M and N) consumed only 48% of the total consumption of this fuel in NACE rev. 2 categories.

The household sector is the largest consumer of gasoline with an average of 88% of total gasoline consumption. For diesel oil, households contribute to total consumption by an average of 53% in the monitored period.

In the analysis of diesel oil consumption, categories C, G and H proved to be the most significant consumers of this fuel in 2013. Together, they consumed up to 87% of diesel oil in road transport in NACE rev. 2 categories. In 2018, there was a change in this case as well, and category C lost its importance, whether targeted or otherwise, it reduced its consumption of diesel oil and it was replaced in the mean of consumption by category N within the three largest consumers of diesel oil. There was also a decrease in the share of the three largest categories in total diesel oil consumption in NACE rev. 2 categories to the level of 71% in 2020.

From these changes, it could be concluded the distribution of fuel consumption is gradually diversifying into NACEs other than the three largest, whether in diesel oil or gasoline (***Fig. 16***).

Fig. 16: *Allocation of fuels and their changes in TJ (dashed line with the vertical axis on the right)*

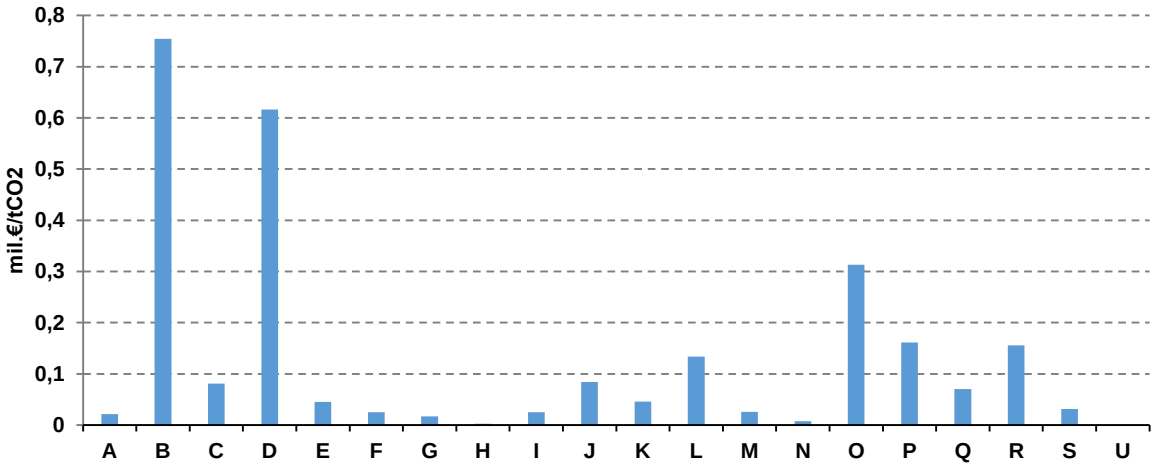


The total results of the new methodology and allocation of all fuels are summarized in **Annex III, *Tab. AIII.1***. There is also a new fuel category – other fossil fuels – which represents the fossil part of biofuels. This one category is not an official statistical category of fuels, thus it is not clear where it should be reported in the PEFA module questionnaire.

7.3 Summary of results

The result of the project helps to get a more precise and accurate allocation of emissions and fuels from road transport to NACE rev.2 categories and households in Slovakia. By improving allocation and separating it from gross value added, it will be possible to perform more comprehensive and accurate analyses. These analyses identify economically productive areas with relatively low emissions (***Fig. 17*** as an example) as well as high-emission areas with low GVA.

Fig.17: *Analyses of CO_2 production compared to GVA in each NACE rev.2 category in 2019*



The information obtained through the comparison of AEA and PEFA accounts is a valuable basis for further and more comprehensive analyses and their outcomes can be used for the policymakers in Slovakia. These analyses help to properly target support and subsidy mechanisms for activities with a higher GVA and, on the contrary, not to motivate activities with a negative impact on the environment and low added value.

7.4 Dissemination of the results

Information about the project was shared for the first time at the annual International Conference Air Protection 2021, which was held from 24th to 27th November 2021, where the project's objectives and time schedule were introduced, as well as the latest information about the current progress. Also, the information was published in Conference proceedings (Improving the allocation of road transport emissions in AEA module and coherence between AEA and PEFA modules, 2021).

At the following International Conference Air Protection 2022, the results of the new allocation of emissions to the NACE categories for the AEA and PEFA were presented. Information was published in the Collection of Conference Abstracts (Results of the EUROSTAT project: New methodology for allocation of Emissions from transport, 2022) as well as e-publication Conference proceedings (Výsledky projektu EUROSTAT: Nová metodika pre alokáci emisií z dopravy, 2022).

The data from about fleet were used to develop projections scenarios presented at the TAP Conference in Graz and published in *Proceedings of the 24th International Transport and Air Pollution (TAP) Conference* (Roadmap to zero carbon road transport, 2022). Data collected as part of the project were also used for scenarios for GHG emissions presented at the ICOS Conference and published in the Book of Abstracts of ICOS Conference (How to rebuild Slovak Agriculture and Transport to a sustainable future?, 2022).

The data obtained as a part of the project were also used to calculate emissions for the Greenhouse gases inventory (published in National Inventory Report 2022 (Szemesová, et al., 2022)) and Air pollutants inventory (published in Informative Inventory Report 2022 (Jonáček, et al., 2022)).

For the public, Information about the project was published on the website of the Dept. of Emissions and Biofuels. All the partial reports are available for the public on this website under Project Reports.

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ANNEX I: COMPARISON OF RESULTS BETWEEN PREVIOUS AND NEW METHODOLOGY

In the following tables, the change in emissions is presented between the new and previous methodology (using inventory data from reporting from 15. 04. 2022).

Tab. AI.1: *Comparison of allocation of emissions from road transport in the main NACE rev.2 categories using the previous and new methodology*[1]

Emissions of CO_2 in Gg						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A-U 1-99	**-1 675.09**	**-2 008.15**	**-1 424.22**	**-1 180.39**	**-1 044.58**	**-801.23**
A	**-54.83**	**-73.57**	**-29.12**	**-63.45**	**-38.84**	**-13.98**
A01	-44.97	-60.44	-28.45	-54.27	-36.79	-9.05
A02	-9.39	-11.70	0.50	-7.79	-1.73	-5.03
A03	-0.47	-1.43	-1.17	-1.38	-0.32	0.10
B	**-8.59**	**-8.23**	**-9.58**	**-4.13**	**-4.60**	**-4.09**
C	**-243.98**	**-258.37**	**-218.52**	**-226.07**	**-198.65**	**-143.15**
C10-C12	-3.91	-5.55	18.27	14.12	18.41	14.76
C13-C15	-9.43	-8.01	-5.11	-3.31	-4.23	-7.56
C16-C18	-13.77	-14.67	-5.18	10.11	5.80	15.18
C16	-4.81	-7.32	-0.49	13.83	7.70	16.45
C17	-7.23	-6.79	-5.83	-5.13	-3.69	-2.39
C18	-1.73	-0.56	1.13	1.41	1.79	1.12
C19	-4.80	-6.27	-27.06	-41.95	-38.92	-16.69
C20	-6.87	-5.00	-5.70	-3.85	-2.20	-6.83
C21	-0.58	-1.64	-1.19	-1.24	-1.47	-1.35
C22_C23	-30.81	-34.35	-28.30	-32.96	-28.56	-24.18
C22	-21.16	-25.06	-23.30	-28.02	-28.63	-24.14
C23	-9.65	-9.29	-5.00	-4.94	0.07	-0.04
C24_C25	-50.43	-56.01	-47.81	-57.29	-45.84	-21.07
C24	-20.80	-21.95	-23.34	-30.62	-30.78	-23.40
C25	-29.63	-34.06	-24.47	-26.67	-15.06	2.33
C26	-16.37	-20.47	-16.44	-14.11	-11.29	-5.66
C27	-18.06	-16.50	-18.86	-16.49	-15.28	-11.15
C28	-19.25	-16.86	-12.55	-5.62	-7.87	-12.02
C29_C30	-54.08	-63.01	-68.37	-72.92	-71.12	-68.08
C29	-51.89	-62.16	-66.82	-71.99	-70.83	-67.46
C30	-2.19	-0.85	-1.55	-0.94	-0.28	-0.62
C31-C33	-15.61	-10.04	-0.22	-0.56	3.92	1.52
C31_C32	-6.35	-4.31	0.86	-1.28	1.03	-0.35
C33	-9.26	-5.73	-1.08	0.72	2.89	1.87
D	**-48.18**	**-38.47**	**-39.96**	**-37.37**	**-34.44**	**-17.99**
E	**-11.30**	**-7.24**	**-6.20**	**-6.12**	**-7.12**	**-6.30**
E36	-3.70	-3.24	-2.47	-4.52	-3.28	-4.39
E37-E39	-7.59	-4.00	-3.73	-1.60	-3.84	-1.92
F	**-60.90**	**-39.32**	**-5.90**	**5.05**	**11.53**	**31.64**
G	**-13.73**	**41.11**	**133.42**	**181.28**	**218.70**	**265.27**
G45	14.71	14.89	25.46	23.76	41.06	58.68
G46	-2.90	13.96	48.52	95.47	112.48	115.34
G47	-25.55	12.26	59.44	62.05	65.16	91.25
H	**-1 032.04**	**-1 518.25**	**-1 287.87**	**-1 103.22**	**-1 152.86**	**-1 088.00**
H49	-1 125.98	-1 559.02	-1 366.36	-1 193.80	-1 273.80	-1 190.13
H50	-3.22	-4.33	-5.33	-4.52	-4.42	-1.91
H51	-3.25	-3.59	-3.60	-3.44	-3.13	-2.60

[1] Zero values are values without change

Emissions of CO_2 in Gg						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
H52	104.52	54.90	87.48	102.49	127.78	108.13
H53	-4.11	-6.22	-0.07	-3.95	0.72	-1.49
I	**5.36**	**11.55**	**15.76**	**19.08**	**20.92**	**26.07**
J	**-30.00**	**-17.94**	**-3.78**	**-5.01**	**-3.49**	**3.68**
J58-J60	-1.29	0.22	2.20	1.39	2.93	2.32
J58	-1.35	-0.28	0.88	0.55	1.20	1.49
J59_J60	0.06	0.50	1.32	0.84	1.73	0.82
J61	-16.44	-14.70	-10.90	-10.39	-10.53	-8.63
J62_J63	-12.27	-3.45	4.92	3.99	4.10	9.99
K	**-35.78**	**-35.20**	**-31.94**	**-21.20**	**-11.83**	**-1.76**
K64	-29.68	-28.72	-25.16	-20.22	-5.09	4.84
K65	-3.72	-4.12	-5.70	-0.08	-6.44	-6.67
K66	-2.38	-2.36	-1.08	-0.91	-0.30	0.07
L	**-65.67**	**-34.83**	**-21.07**	**-17.34**	**-11.01**	**-39.07**
L68A	-65.67	-34.83	-21.07	-17.34	-11.01	-39.07
M	**21.18**	**32.11**	**68.08**	**75.37**	**89.54**	**98.78**
M69-M71	13.25	25.68	45.63	51.80	69.89	74.19
M69_M70	15.47	20.26	32.17	39.64	53.85	58.19
M71	-2.22	5.43	13.46	12.16	16.04	16.01
M72	-2.48	-1.25	-0.62	-1.45	-0.98	-1.66
M73-M75	10.41	7.68	23.07	25.02	20.64	26.24
M73	5.69	3.21	12.95	11.59	11.22	12.33
M74_M75	4.72	4.47	10.12	13.43	9.42	13.91
N	**27.06**	**38.83**	**77.28**	**89.91**	**148.30**	**146.99**
N77	16.35	17.08	32.81	53.50	76.79	90.51
N78	-1.47	-1.49	-0.88	-0.90	-0.26	0.37
N79	1.41	2.09	5.94	4.69	7.77	6.15
N80-N82	10.77	21.15	39.40	32.62	63.99	49.96
O	**-63.40**	**-53.17**	**-43.96**	**-55.70**	**-56.02**	**-55.39**
P	**-26.81**	**-22.45**	**-15.59**	**-17.82**	**-17.85**	**-20.46**
Q	**-17.60**	**-10.22**	**-0.12**	**-3.59**	**1.90**	**0.93**
Q86	-14.76	-8.02	1.25	-1.92	3.40	4.82
Q87_Q88	-2.84	-2.20	-1.38	-1.66	-1.50	-3.89
R	**-16.59**	**-15.60**	**-11.79**	**2.29**	**-5.97**	**4.28**
R90-R90	-18.09	-17.96	-16.66	-3.19	-12.66	-0.49
R93	1.50	2.37	4.87	5.48	6.69	4.77
S	**0.45**	**0.84**	**6.21**	**7.21**	**6.84**	**11.36**
S94	0.96	1.47	2.52	2.15	2.09	2.33
S95	-0.23	0.61	1.39	2.82	1.89	3.73
S96	-0.28	-1.25	2.29	2.24	2.87	5.30
T	**-**	**-**	**-**	**-**	**-**	**-0.48**
U	**0.25**	**0.28**	**0.43**	**0.44**	**0.37**	**0.42**
HH total	**1 675.09**	**2 008.15**	**1 424.22**	**1 180.39**	**1 044.58**	**801.23**
HH Transport	1 675.09	2 008.15	1 424.22	1 180.39	1 044.58	801.23
HH Heating/cooling	-	-	-	-	-	-
HH Other	-	-	-	-	-	-

Emissions of bio CO_2 in Gg						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A-U 1-99	**-66.17**	**-100.06**	**-61.83**	**-50.47**	**-50.19**	**-38.00**
A	**-2.42**	**-3.80**	**-1.32**	**-3.60**	**-2.28**	**-0.73**
A01	-2.00	-3.13	-1.35	-3.12	-2.23	-0.43
A02	-0.40	-0.60	0.09	-0.40	-0.03	-0.30
A03	-0.02	-0.08	-0.06	-0.08	-0.02	0.01
B	**-0.38**	**-0.43**	**-0.49**	**-0.23**	**-0.29**	**-0.26**
C	**-11.14**	**-13.40**	**-10.96**	**-12.85**	**-12.21**	**-8.98**

Emissions of bio CO_2 in Gg						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
C10-C12	-0.07	-0.24	1.13	1.01	1.34	1.11
C13-C15	-0.44	-0.42	-0.26	-0.19	-0.27	-0.50
C16-C18	-0.59	-0.74	-0.21	0.81	0.47	1.13
C16	-0.17	-0.35	0.03	1.03	0.59	1.19
C17	-0.34	-0.36	-0.30	-0.30	-0.23	-0.15
C18	-0.08	-0.03	0.06	0.08	0.11	0.09
C19	-0.22	-0.33	-1.42	-2.51	-2.50	-1.10
C20	-0.32	-0.26	-0.29	-0.23	-0.13	-0.44
C21	-0.03	-0.09	-0.06	-0.07	-0.09	-0.09
C22_C23	-1.39	-1.78	-1.41	-1.90	-1.74	-1.54
C22	-0.97	-1.31	-1.19	-1.66	-1.82	-1.59
C23	-0.42	-0.47	-0.22	-0.24	0.09	0.05
C24_C25	-2.31	-2.91	-2.41	-3.34	-2.87	-1.31
C24	-0.96	-1.15	-1.21	-1.82	-1.96	-1.54
C25	-1.35	-1.76	-1.20	-1.52	-0.91	0.23
C26	-0.77	-1.08	-0.86	-0.84	-0.72	-0.37
C27	-0.84	-0.86	-0.98	-0.97	-0.95	-0.72
C28	-0.89	-0.86	-0.64	-0.25	-0.47	-0.76
C29_C30	-2.53	-3.31	-3.57	-4.35	-4.54	-4.49
C29	-2.43	-3.27	-3.49	-4.30	-4.53	-4.45
C30	-0.10	-0.04	-0.08	-0.05	-0.01	-0.04
C31-C33	-0.72	-0.52	0.03	-0.01	0.28	0.11
C31_C32	-0.30	-0.23	0.07	-0.08	0.07	-0.02
C33	-0.43	-0.29	-0.04	0.07	0.21	0.14
D	**-2.26**	**-2.03**	**-2.09**	**-2.24**	**-2.21**	**-1.19**
E	**-0.50**	**-0.37**	**-0.30**	**-0.31**	**-0.42**	**-0.37**
E36	-0.17	-0.17	-0.12	-0.27	-0.20	-0.28
E37-E39	-0.34	-0.20	-0.17	-0.04	-0.21	-0.09
F	**-2.57**	**-1.87**	**0.08**	**0.88**	**1.22**	**2.50**
G	**0.37**	**2.69**	**7.96**	**12.50**	**15.52**	**18.91**
G45	0.83	0.84	1.45	1.54	2.83	4.10
G46	0.41	1.02	2.98	6.66	8.03	8.31
G47	-0.88	0.83	3.53	4.30	4.66	6.50
H	**-38.23**	**-75.53**	**-57.26**	**-49.64**	**-60.67**	**-60.03**
H49	-43.47	-78.04	-62.10	-56.13	-69.55	-67.57
H50	-0.15	-0.23	-0.27	-0.27	-0.28	-0.12
H51	-0.15	-0.19	-0.19	-0.20	-0.20	-0.17
H52	5.71	3.24	5.24	7.16	9.24	7.90
H53	-0.17	-0.32	0.05	-0.19	0.12	-0.07
I	**0.30**	**0.65**	**0.85**	**1.19**	**1.37**	**1.76**
J	**-1.42**	**-0.94**	**-0.18**	**-0.31**	**-0.25**	**0.26**
J58-J60	-0.06	0.01	0.12	0.07	0.18	0.15
J58	-0.07	-0.02	0.04	0.03	0.07	0.09
J59_J60	0.00	0.03	0.07	0.05	0.11	0.05
J61	-0.77	-0.77	-0.57	-0.61	-0.67	-0.56
J62_J63	-0.58	-0.18	0.27	0.23	0.24	0.68
K	**-1.68**	**-1.85**	**-1.66**	**-1.24**	**-0.72**	**-0.07**
K64	-1.39	-1.51	-1.30	-1.18	-0.28	0.37
K65	-0.17	-0.22	-0.30	0.00	-0.41	-0.44
K66	-0.12	-0.13	-0.06	-0.06	-0.03	0.00
L	**-3.01**	**-1.78**	**-1.02**	**-0.89**	**-0.56**	**-2.46**
L68A	-3.01	-1.78	-1.02	-0.89	-0.56	-2.46
M	**1.13**	**1.76**	**3.66**	**4.61**	**5.81**	**6.60**
M69-M71	0.70	1.41	2.43	3.15	4.55	4.95
M69_M70	0.81	1.13	1.73	2.45	3.55	3.91
M71	-0.11	0.29	0.70	0.70	1.01	1.03
M72	-0.12	-0.07	-0.03	-0.09	-0.06	-0.11

Emissions of bio CO_2 in Gg						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
M73-M75	0.55	0.41	1.26	1.54	1.32	1.76
M73	0.30	0.17	0.71	0.70	0.72	0.82
M74_M75	0.25	0.24	0.55	0.84	0.61	0.94
N	**1.48**	**2.18**	**4.37**	**5.86**	**10.21**	**10.12**
N77	0.90	0.97	1.89	3.55	5.28	6.23
N78	-0.06	-0.08	-0.04	-0.04	-0.01	0.03
N79	0.09	0.12	0.35	0.32	0.56	0.44
N80-N82	0.56	1.16	2.18	2.04	4.38	3.41
O	**-3.01**	**-2.82**	**-2.34**	**-3.41**	**-3.65**	**-3.71**
P	**-1.27**	**-1.20**	**-0.84**	**-1.10**	**-1.19**	**-1.38**
Q	**-0.84**	**-0.55**	**-0.03**	**-0.29**	**0.04**	**-0.01**
Q86	-0.70	-0.43	0.05	-0.18	0.15	0.26
Q87_Q88	-0.14	-0.12	-0.08	-0.11	-0.11	-0.27
R	**-0.77**	**-0.81**	**-0.60**	**0.16**	**-0.36**	**0.29**
R90-R90	-0.85	-0.95	-0.87	-0.19	-0.82	-0.03
R93	0.08	0.13	0.27	0.36	0.46	0.33
S	**0.03**	**0.04**	**0.33**	**0.43**	**0.42**	**0.75**
S94	0.04	0.07	0.12	0.11	0.12	0.14
S95	-0.01	0.03	0.07	0.18	0.12	0.25
S96	0.01	-0.06	0.13	0.14	0.18	0.36
T	**-**	**-**	**-**	**-**	**-**	**-0.03**
U	**0.01**	**0.02**	**0.02**	**0.03**	**0.02**	**0.03**
HH total	**66.17**	**100.06**	**61.83**	**50.47**	**50.19**	**38.00**
HH Transport	66.17	100.06	61.83	50.47	50.19	38.00
HH Heating/cooling	-	-	-	-	-	-
HH Other	-	-	-	-	-	-

Emissions of CH_4 in Mg						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A-U 1-99	**-135.51**	**-141.51**	**-86.27**	**-48.48**	**-71.63**	**-35.09**
A	**-4.44**	**-4.95**	**-2.31**	**-2.26**	**-2.17**	**-0.80**
A01	-3.50	-3.96	-1.94	-1.84	-1.80	-0.57
A02	-0.91	-0.91	-0.31	-0.38	-0.36	-0.23
A03	-0.03	-0.08	-0.05	-0.04	-0.01	0.00
B	**-0.65**	**-0.50**	**-0.49**	**-0.19**	**-0.25**	**-0.15**
C	**-18.63**	**-17.89**	**-14.51**	**-10.55**	**-13.13**	**-6.72**
C10-C12	-0.94	-0.85	-0.01	0.04	0.04	-0.01
C13-C15	-0.69	-0.57	-0.36	-0.22	-0.30	-0.29
C16-C18	-1.38	-1.31	-0.77	-0.25	-0.39	-0.05
C16	-0.74	-0.81	-0.44	-0.05	-0.22	0.08
C17	-0.49	-0.41	-0.32	-0.20	-0.21	-0.09
C18	-0.16	-0.08	-0.01	0.00	0.04	-0.04
C19	-0.31	-0.36	-1.32	-1.43	-1.78	-0.48
C20	-0.47	-0.34	-0.33	-0.17	-0.16	-0.25
C21	-0.04	-0.10	-0.07	-0.05	-0.07	-0.04
C22_C23	-2.35	-2.32	-1.84	-1.40	-1.87	-0.97
C22	-1.53	-1.58	-1.36	-1.07	-1.46	-0.79
C23	-0.82	-0.74	-0.48	-0.33	-0.41	-0.18
C24_C25	-3.92	-3.95	-3.24	-2.57	-2.93	-1.25
C24	-1.44	-1.31	-1.22	-1.09	-1.49	-0.70
C25	-2.48	-2.64	-2.02	-1.49	-1.45	-0.55
C26	-1.08	-1.21	-0.84	-0.51	-0.56	-0.20
C27	-1.26	-1.05	-1.05	-0.68	-0.90	-0.43
C28	-1.38	-1.23	-0.80	-0.45	-0.61	-0.53
C29_C30	-3.54	-3.71	-3.42	-2.55	-3.39	-2.02
C29	-3.39	-3.61	-3.32	-2.50	-3.35	-1.99

Emissions of CH_4 in Mg						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
C30	-0.16	-0.10	-0.09	-0.05	-0.04	-0.03
C31-C33	-1.26	-0.88	-0.46	-0.31	-0.21	-0.21
C31_C32	-0.52	-0.35	-0.17	-0.15	-0.08	-0.10
C33	-0.75	-0.53	-0.29	-0.17	-0.13	-0.11
D	**-3.16**	**-2.30**	**-2.02**	**-1.36**	**-1.63**	**-0.67**
E	**-0.93**	**-0.60**	**-0.49**	**-0.31**	**-0.44**	**-0.30**
E36	-0.30	-0.23	-0.17	-0.16	-0.16	-0.14
E37-E39	-0.63	-0.36	-0.32	-0.15	-0.27	-0.15
F	**-6.55**	**-5.11**	**-3.31**	**-2.03**	**-2.42**	**-1.14**
G	**-8.32**	**-4.63**	**-0.87**	**0.38**	**1.47**	**1.97**
G45	-0.03	0.06	0.38	0.26	0.73	0.83
G46	-4.02	-2.68	-0.99	0.24	0.75	0.64
G47	-4.27	-2.01	-0.26	-0.13	-0.01	0.49
H	**-71.15**	**-91.06**	**-53.49**	**-25.80**	**-47.55**	**-22.84**
H49	-72.89	-90.61	-53.84	-26.69	-48.36	-23.80
H50	-0.24	-0.31	-0.45	-0.28	-0.39	-0.15
H51	-0.06	-0.07	-0.06	-0.05	-0.06	-0.03
H52	2.45	0.35	1.07	1.41	1.44	1.22
H53	-0.40	-0.42	-0.21	-0.19	-0.19	-0.08
I	**-0.25**	**-0.08**	**0.16**	**0.13**	**0.30**	**0.24**
J	**-2.61**	**-1.74**	**-1.19**	**-0.98**	**-1.07**	**-0.72**
J58-J60	-0.21	-0.12	-0.05	-0.08	0.00	-0.05
J58	-0.14	-0.07	-0.02	-0.04	0.01	0.00
J59_J60	-0.06	-0.05	-0.03	-0.04	-0.01	-0.05
J61	-1.18	-0.95	-0.72	-0.49	-0.65	-0.38
J62_J63	-1.22	-0.67	-0.41	-0.41	-0.42	-0.29
K	**-2.60**	**-2.30**	**-2.11**	**-1.22**	**-1.32**	**-0.72**
K64	-2.12	-1.84	-1.61	-1.08	-0.87	-0.41
K65	-0.26	-0.26	-0.35	-0.02	-0.36	-0.24
K66	-0.22	-0.20	-0.15	-0.11	-0.09	-0.07
L	**-5.42**	**-2.99**	**-2.30**	**-1.62**	**-2.03**	**-2.30**
L68A	-5.42	-2.99	-2.30	-1.62	-2.03	-2.30
M	**-1.10**	**-0.65**	**0.53**	**0.19**	**1.22**	**0.65**
M69-M71	-0.85	-0.46	0.26	-0.02	0.94	0.49
M69_M70	-0.31	-0.29	0.17	0.06	0.73	0.45
M71	-0.54	-0.17	0.09	-0.08	0.21	0.04
M72	-0.19	-0.10	-0.07	-0.08	-0.08	-0.08
M73-M75	-0.05	-0.09	0.34	0.29	0.36	0.25
M73	-0.04	-0.09	0.17	0.09	0.17	0.08
M74_M75	-0.01	0.00	0.17	0.20	0.19	0.17
N	**-0.16**	**0.22**	**1.12**	**0.84**	**2.10**	**1.43**
N77	0.23	0.19	0.51	0.61	1.17	0.98
N78	-0.17	-0.15	-0.13	-0.09	-0.09	-0.05
N79	-0.03	0.01	0.12	0.10	0.13	0.08
N80-N82	-0.19	0.16	0.62	0.22	0.89	0.41
O	**-4.38**	**-3.16**	**-2.48**	**-2.19**	**-2.82**	**-1.87**
P	**-1.88**	**-1.37**	**-0.92**	**-0.70**	**-0.92**	**-0.77**
Q	**-1.72**	**-1.18**	**-0.76**	**-0.77**	**-0.50**	**-0.51**
Q86	-1.51	-1.03	-0.66	-0.68	-0.41	-0.36
Q87_Q88	-0.21	-0.15	-0.10	-0.09	-0.09	-0.15
R	**-1.30**	**-1.10**	**-0.90**	**-0.09**	**-0.58**	**-0.01**
R90-R90	-1.30	-1.13	-1.03	-0.19	-0.73	-0.09
R93	-0.01	0.04	0.13	0.10	0.14	0.08
S	**-0.26**	**-0.14**	**0.05**	**0.04**	**0.12**	**0.13**
S94	0.03	0.06	0.10	0.06	0.09	0.07
S95	-0.07	-0.02	0.00	0.02	0.03	0.04
S96	-0.23	-0.19	-0.05	-0.04	0.00	0.02

Emissions of CH_4 in Mg						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
T	**-**	**-**	**-**	**-**	**-**	**-0.02**
U	**0.01**	**0.01**	**0.01**	**0.00**	**0.01**	**0.00**
HH total	**135.51**	**141.51**	**86.27**	**48.48**	**71.63**	**35.09**
HH Transport	135.51	141.51	86.27	48.48	71.63	35.09
HH Heating/cooling	-	-	-	-	-	-
HH Other	-	-	-	-	-	-

Emissions of N_2O in Mg						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A-U 1-99	**-50.82**	**-77.22**	**-56.57**	**-39.74**	**-39.85**	**-27.77**
A	**-1.46**	**-2.22**	**-0.64**	**-2.08**	**-1.21**	**-0.20**
A01	-1.22	-1.83	-0.72	-1.81	-1.25	-0.04
A02	-0.23	-0.35	0.12	-0.22	0.05	-0.16
A03	-0.01	-0.05	-0.04	-0.05	-0.01	0.00
B	**-0.23**	**-0.26**	**-0.31**	**-0.11**	**-0.14**	**-0.13**
C	**-7.08**	**-7.91**	**-5.92**	**-6.02**	**-5.33**	**-3.72**
C10-C12	0.05	-0.05	1.00	0.77	0.99	0.86
C13-C15	-0.29	-0.26	-0.16	-0.10	-0.15	-0.27
C16-C18	-0.33	-0.40	-0.04	0.71	0.40	0.81
C16	-0.06	-0.17	0.10	0.83	0.47	0.81
C17	-0.22	-0.22	-0.18	-0.16	-0.11	-0.07
C18	-0.05	-0.02	0.04	0.04	0.05	0.07
C19	-0.15	-0.20	-0.86	-1.32	-1.25	-0.55
C20	-0.21	-0.15	-0.17	-0.12	-0.06	-0.20
C21	-0.02	-0.05	-0.04	-0.04	-0.05	-0.04
C22_C23	-0.88	-1.05	-0.75	-0.92	-0.70	-0.67
C22	-0.62	-0.79	-0.68	-0.86	-0.91	-0.80
C23	-0.25	-0.26	-0.07	-0.06	0.21	0.13
C24_C25	-1.49	-1.75	-1.35	-1.74	-1.41	-0.59
C24	-0.62	-0.70	-0.71	-0.95	-0.96	-0.77
C25	-0.87	-1.05	-0.64	-0.79	-0.44	0.19
C26	-0.51	-0.66	-0.52	-0.45	-0.36	-0.19
C27	-0.55	-0.52	-0.58	-0.50	-0.44	-0.34
C28	-0.58	-0.49	-0.37	-0.02	-0.20	-0.32
C29_C30	-1.67	-2.01	-2.16	-2.28	-2.25	-2.24
C29	-1.60	-2.00	-2.11	-2.25	-2.25	-2.22
C30	-0.07	-0.01	-0.05	-0.03	0.00	-0.02
C31-C33	-0.47	-0.32	0.07	-0.02	0.15	0.02
C31_C32	-0.19	-0.14	0.08	-0.04	0.03	-0.03
C33	-0.28	-0.18	-0.01	0.03	0.11	0.05
D	**-1.49**	**-1.23**	**-1.24**	**-1.14**	**-1.11**	**-0.50**
E	**-0.30**	**-0.20**	**-0.15**	**-0.15**	**-0.22**	**-0.15**
E36	-0.10	-0.10	-0.07	-0.15	-0.11	-0.15
E37-E39	-0.20	-0.11	-0.08	0.00	-0.11	0.00
F	**-1.51**	**-0.95**	**0.32**	**0.65**	**0.72**	**1.36**
G	**1.11**	**2.40**	**6.18**	**8.45**	**9.78**	**12.13**
G45	0.63	0.56	0.99	0.87	1.69	2.52
G46	0.77	1.06	2.41	4.66	5.19	5.46
G47	-0.29	0.78	2.78	2.92	2.90	4.15
H	**-34.16**	**-63.64**	**-58.11**	**-43.64**	**-49.76**	**-44.75**
H49	-38.45	-65.92	-62.60	-48.96	-56.82	-50.75
H50	-0.09	-0.12	-0.11	-0.11	-0.11	-0.03
H51	-0.09	-0.10	-0.09	-0.08	-0.08	-0.06
H52	4.55	2.69	4.58	5.57	7.08	6.08
H53	-0.08	-0.18	0.11	-0.06	0.17	0.01
I	**0.23**	**0.46**	**0.59**	**0.72**	**0.77**	**1.02**

Emissions of N_2O in Mg						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
J	**-0.93**	**-0.59**	**0.05**	**-0.05**	**-0.06**	**0.32**
J58-J60	-0.04	0.00	0.08	0.05	0.09	0.07
J58	-0.04	-0.01	0.04	0.02	0.03	0.04
J59_J60	0.00	0.01	0.05	0.03	0.05	0.03
J61	-0.50	-0.46	-0.28	-0.27	-0.29	-0.23
J62_J63	-0.38	-0.13	0.24	0.17	0.14	0.48
K	**-1.09**	**-1.12**	**-0.81**	**-0.51**	**-0.30**	**0.08**
K64	-0.90	-0.90	-0.64	-0.49	-0.11	0.26
K65	-0.11	-0.13	-0.15	0.00	-0.18	-0.18
K66	-0.08	-0.08	-0.02	-0.02	-0.01	0.00
L	**-1.92**	**-1.04**	**-0.35**	**-0.11**	**0.14**	**-0.59**
L68A	-1.92	-1.04	-0.35	-0.11	0.14	-0.59
M	**0.84**	**1.05**	**2.43**	**2.64**	**3.09**	**3.51**
M69-M71	0.50	0.85	1.54	1.80	2.47	2.63
M69_M70	0.58	0.69	1.08	1.42	1.96	2.13
M71	-0.08	0.16	0.46	0.38	0.50	0.50
M72	-0.08	-0.04	-0.01	-0.04	-0.03	-0.05
M73-M75	0.42	0.24	0.90	0.88	0.65	0.93
M73	0.22	0.08	0.50	0.38	0.35	0.40
M74_M75	0.19	0.16	0.39	0.50	0.30	0.53
N	**1.09**	**1.41**	**3.05**	**3.45**	**5.88**	**5.44**
N77	0.70	0.67	1.38	2.21	2.82	3.27
N78	-0.05	-0.05	-0.02	-0.02	-0.01	0.02
N79	0.03	0.05	0.18	0.12	0.31	0.23
N80-N82	0.40	0.74	1.51	1.15	2.76	1.93
O	**-1.98**	**-1.73**	**-1.21**	**-1.57**	**-1.63**	**-1.59**
P	**-0.86**	**-0.76**	**-0.44**	**-0.51**	**-0.54**	**-0.52**
Q	**-0.57**	**-0.39**	**0.04**	**-0.13**	**-0.02**	**-0.04**
Q86	-0.48	-0.32	0.08	-0.09	0.03	0.07
Q87_Q88	-0.09	-0.07	-0.03	-0.05	-0.04	-0.11
R	**-0.53**	**-0.52**	**-0.31**	**0.08**	**-0.13**	**0.12**
R90-R90	-0.56	-0.58	-0.45	-0.09	-0.36	-0.01
R93	0.03	0.06	0.13	0.17	0.23	0.13
S	**0.04**	**0.02**	**0.25**	**0.27**	**0.23**	**0.43**
S94	0.02	0.04	0.08	0.06	0.06	0.06
S95	0.00	0.02	0.05	0.12	0.06	0.15
S96	0.02	-0.04	0.11	0.09	0.11	0.22
T	**-**	**-**	**-**	**-**	**-**	**-0.01**
U	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**
HH total	**48.77**	**74.61**	**54.33**	**38.55**	**38.78**	**26.99**
HH Transport	48.77	74.61	54.33	38.55	38.78	26.99
HH Heating/cooling	**-**	**-**	**-**	**-**	**-**	**-**
HH Other	**-**	**-**	**-**	**-**	**-**	**-**

Emissions of NO_x in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A-U 1-99	**-5.23**	**-7.28**	**-3.25**	**-2.79**	**-2.27**	**-1.94**
A	**-0.25**	**-0.29**	**-0.10**	**-0.22**	**-0.13**	**-0.05**
A01	-0.20	-0.24	-0.10	-0.19	-0.12	-0.03
A02	-0.05	-0.05	0.00	-0.03	-0.01	-0.02
A03	0.00	-0.01	0.00	0.00	0.00	0.00
B	**-0.04**	**-0.03**	**-0.03**	**-0.01**	**-0.01**	**-0.01**
C	**-1.00**	**-0.93**	**-0.76**	**-0.75**	**-0.64**	**-0.47**
C10-C12	0.00	-0.02	0.07	0.05	0.05	0.04
C13-C15	-0.04	-0.03	-0.02	-0.01	-0.02	-0.02
C16-C18	-0.05	-0.05	-0.02	0.03	0.01	0.04

Emissions of NO_x in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
C16	-0.01	-0.03	0.00	0.05	0.02	0.04
C17	-0.03	-0.02	-0.02	-0.02	-0.01	-0.01
C18	-0.01	0.00	0.00	0.00	0.00	0.00
C19	-0.02	-0.02	-0.09	-0.13	-0.12	-0.05
C20	-0.03	-0.02	-0.02	-0.01	-0.01	-0.02
C21	0.00	-0.01	0.00	0.00	0.00	0.00
C22_C23	-0.12	-0.12	-0.10	-0.11	-0.09	-0.08
C22	-0.09	-0.09	-0.08	-0.09	-0.09	-0.07
C23	-0.04	-0.03	-0.02	-0.02	0.00	0.00
C24_C25	-0.22	-0.21	-0.17	-0.19	-0.15	-0.07
C24	-0.08	-0.08	-0.08	-0.10	-0.09	-0.07
C25	-0.13	-0.13	-0.09	-0.09	-0.05	0.00
C26	-0.07	-0.07	-0.06	-0.05	-0.04	-0.02
C27	-0.08	-0.06	-0.07	-0.05	-0.05	-0.03
C28	-0.08	-0.06	-0.05	-0.02	-0.03	-0.04
C29_C30	-0.22	-0.22	-0.23	-0.23	-0.22	-0.20
C29	-0.21	-0.22	-0.23	-0.23	-0.22	-0.20
C30	-0.01	0.00	-0.01	0.00	0.00	0.00
C31-C33	-0.07	-0.04	-0.01	-0.01	0.01	0.00
C31_C32	-0.03	-0.02	0.00	-0.01	0.00	0.00
C33	-0.04	-0.02	-0.01	0.00	0.01	0.00
D	**-0.18**	**-0.12**	**-0.14**	**-0.12**	**-0.11**	**-0.08**
E	**-0.04**	**-0.03**	**-0.02**	**-0.02**	**-0.03**	**-0.02**
E36	-0.01	-0.01	-0.01	-0.02	-0.01	-0.01
E37-E39	-0.03	-0.01	-0.01	-0.01	-0.01	-0.01
F	**-0.27**	**-0.16**	**-0.04**	**0.00**	**0.01**	**0.07**
G	**-0.02**	**0.12**	**0.43**	**0.53**	**0.58**	**0.65**
G45	0.07	0.05	0.09	0.07	0.12	0.15
G46	0.02	0.04	0.15	0.28	0.30	0.28
G47	-0.12	0.03	0.19	0.17	0.16	0.22
H	**-2.97**	**-5.53**	**-2.59**	**-2.30**	**-2.24**	**-2.26**
H49	-3.56	-5.75	-2.95	-2.64	-2.62	-2.55
H50	0.00	0.00	0.00	0.00	0.00	0.00
H51	0.00	0.00	0.00	0.00	0.00	0.00
H52	0.60	0.25	0.35	0.35	0.38	0.30
H53	-0.01	-0.02	0.00	-0.01	0.00	-0.01
I	**0.03**	**0.04**	**0.04**	**0.05**	**0.05**	**0.06**
J	**-0.09**	**-0.06**	**-0.03**	**-0.03**	**-0.03**	**-0.01**
J58-J60	-0.01	0.00	0.00	0.00	0.00	0.00
J58	0.00	0.00	0.00	0.00	0.00	0.00
J59_J60	0.00	0.00	0.00	0.00	0.00	0.00
J61	-0.05	-0.04	-0.04	-0.03	-0.03	-0.03
J62_J63	-0.04	-0.02	0.00	0.00	0.00	0.01
K	**-0.11**	**-0.11**	**-0.11**	**-0.07**	**-0.05**	**-0.02**
K64	-0.09	-0.09	-0.09	-0.06	-0.02	0.00
K65	-0.01	-0.01	-0.02	0.00	-0.02	-0.02
K66	-0.01	-0.01	-0.01	-0.01	0.00	0.00
L	**-0.17**	**-0.10**	**-0.08**	**-0.06**	**-0.05**	**-0.13**
L68A	-0.17	-0.10	-0.08	-0.06	-0.05	-0.13
M	**0.09**	**0.08**	**0.17**	**0.17**	**0.19**	**0.20**
M69-M71	0.05	0.07	0.10	0.11	0.15	0.15
M69_M70	0.07	0.06	0.07	0.09	0.12	0.12
M71	-0.01	0.01	0.03	0.02	0.03	0.03
M72	-0.01	0.00	0.00	-0.01	0.00	-0.01
M73-M75	0.05	0.02	0.07	0.07	0.05	0.06
M73	0.03	0.01	0.04	0.03	0.02	0.03
M74_M75	0.02	0.01	0.03	0.04	0.02	0.03

Emissions of NO_x in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
N	**0.15**	**0.14**	**0.26**	**0.28**	**0.42**	**0.36**
N77	0.10	0.06	0.11	0.17	0.22	0.22
N78	0.00	0.00	0.00	0.00	0.00	0.00
N79	0.01	0.01	0.03	0.02	0.03	0.02
N80-N82	0.05	0.07	0.12	0.09	0.17	0.12
O	**-0.19**	**-0.16**	**-0.15**	**-0.18**	**-0.18**	**-0.17**
P	**-0.07**	**-0.06**	**-0.05**	**-0.05**	**-0.05**	**-0.06**
Q	**-0.06**	**-0.04**	**-0.03**	**-0.04**	**-0.02**	**-0.02**
Q86	-0.05	-0.04	-0.02	-0.03	-0.02	-0.01
Q87_Q88	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
R	**-0.04**	**-0.04**	**-0.03**	**0.01**	**-0.01**	**0.02**
R90-R90	-0.05	-0.05	-0.06	-0.01	-0.04	0.00
R93	0.01	0.01	0.02	0.02	0.02	0.02
S	**0.01**	**0.00**	**0.02**	**0.02**	**0.02**	**0.03**
S94	0.00	0.00	0.01	0.01	0.01	0.01
S95	0.00	0.00	0.00	0.01	0.00	0.01
S96	0.01	0.00	0.01	0.01	0.01	0.01
T	**-**	**-**	**-**	**-**	**-**	**0.00**
U	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
HH total	**5.23**	**7.28**	**3.25**	**2.79**	**2.27**	**1.94**
HH Transport	5.23	7.28	3.25	2.79	2.27	1.94
HH Heating/cooling	**-**	**-**	**-**	**-**	**-**	**-**
HH Other	**-**	**-**	**-**	**-**	**-**	**-**

Emissions of NMVOC in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A-U 1-99	**-1.60**	**-1.31**	**-1.05**	**-0.84**	**-0.97**	**-0.71**
A	**-0.06**	**-0.06**	**-0.03**	**-0.03**	**-0.03**	**-0.02**
A01	-0.05	-0.04	-0.03	-0.03	-0.03	-0.01
A02	-0.01	-0.01	-0.01	-0.01	-0.01	0.00
A03	0.00	0.00	0.00	0.00	0.00	0.00
B	**-0.01**	**-0.01**	**-0.01**	**0.00**	**-0.01**	**0.00**
C	**-0.31**	**-0.28**	**-0.27**	**-0.23**	**-0.29**	**-0.18**
C10-C12	-0.02	-0.02	-0.01	0.00	-0.01	-0.01
C13-C15	-0.01	-0.01	-0.01	0.00	-0.01	-0.01
C16-C18	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01
C16	-0.01	-0.01	-0.01	-0.01	-0.01	0.00
C17	-0.01	-0.01	-0.01	0.00	0.00	0.00
C18	0.00	0.00	0.00	0.00	0.00	0.00
C19	-0.01	-0.01	-0.02	-0.03	-0.04	-0.01
C20	-0.01	-0.01	-0.01	0.00	0.00	-0.01
C21	0.00	0.00	0.00	0.00	0.00	0.00
C22_C23	-0.04	-0.04	-0.03	-0.03	-0.04	-0.02
C22	-0.03	-0.02	-0.02	-0.02	-0.03	-0.02
C23	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
C24_C25	-0.07	-0.06	-0.06	-0.06	-0.07	-0.03
C24	-0.02	-0.02	-0.02	-0.02	-0.03	-0.02
C25	-0.04	-0.04	-0.04	-0.03	-0.03	-0.02
C26	-0.02	-0.02	-0.01	-0.01	-0.01	0.00
C27	-0.02	-0.02	-0.02	-0.01	-0.02	-0.01
C28	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01
C29_C30	-0.06	-0.06	-0.06	-0.05	-0.07	-0.05
C29	-0.05	-0.06	-0.06	-0.05	-0.07	-0.04
C30	0.00	0.00	0.00	0.00	0.00	0.00
C31-C33	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01
C31_C32	-0.01	-0.01	0.00	0.00	0.00	0.00
C33	-0.01	-0.01	-0.01	0.00	0.00	0.00

Emissions of NMVOC in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
D	**-0.06**	**-0.05**	**-0.04**	**-0.03**	**-0.03**	**-0.02**
E	**-0.02**	**-0.01**	**-0.01**	**-0.01**	**-0.01**	**-0.01**
E36	-0.01	0.00	0.00	0.00	0.00	0.00
E37-E39	-0.01	-0.01	-0.01	0.00	0.00	0.00
F	**-0.11**	**-0.08**	**-0.06**	**-0.05**	**-0.06**	**-0.04**
G	**-0.16**	**-0.10**	**-0.06**	**-0.05**	**-0.03**	**-0.03**
G45	-0.01	0.00	0.00	0.00	0.00	0.00
G46	-0.08	-0.05	-0.03	-0.02	-0.02	-0.02
G47	-0.07	-0.04	-0.02	-0.02	-0.02	-0.01
H	**-0.29**	**-0.32**	**-0.25**	**-0.19**	**-0.21**	**-0.16**
H49	-0.28	-0.29	-0.23	-0.18	-0.20	-0.15
H50	0.00	0.00	0.00	0.00	0.00	0.00
H51	0.00	0.00	0.00	0.00	0.00	0.00
H52	0.00	-0.02	-0.01	0.00	-0.01	-0.01
H53	-0.01	-0.01	0.00	0.00	0.00	0.00
I	**-0.01**	**-0.01**	**0.00**	**0.00**	**0.00**	**0.00**
J	**-0.07**	**-0.05**	**-0.04**	**-0.03**	**-0.04**	**-0.03**
J58-J60	-0.01	0.00	0.00	0.00	0.00	0.00
J58	0.00	0.00	0.00	0.00	0.00	0.00
J59_J60	0.00	0.00	0.00	0.00	0.00	0.00
J61	-0.03	-0.02	-0.02	-0.01	-0.02	-0.01
J62_J63	-0.03	-0.02	-0.02	-0.01	-0.02	-0.02
K	**-0.06**	**-0.05**	**-0.05**	**-0.03**	**-0.04**	**-0.02**
K64	-0.05	-0.04	-0.04	-0.03	-0.02	-0.01
K65	-0.01	-0.01	-0.01	0.00	-0.01	-0.01
K66	-0.01	-0.01	0.00	0.00	0.00	0.00
L	**-0.13**	**-0.07**	**-0.06**	**-0.05**	**-0.06**	**-0.07**
L68A	-0.13	-0.07	-0.06	-0.05	-0.06	-0.07
M	**-0.05**	**-0.04**	**-0.02**	**-0.02**	**-0.02**	**-0.02**
M69-M71	-0.04	-0.03	-0.02	-0.02	-0.02	-0.02
M69_M70	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01
M71	-0.02	-0.01	0.00	-0.01	-0.01	-0.01
M72	0.00	0.00	0.00	0.00	0.00	0.00
M73-M75	-0.01	-0.01	0.00	0.00	0.00	0.00
M73	-0.01	-0.01	0.00	0.00	0.00	0.00
M74_M75	0.00	0.00	0.00	0.00	0.00	0.00
N	**-0.03**	**-0.01**	**0.00**	**0.00**	**0.00**	**0.00**
N77	-0.01	0.00	0.00	0.00	0.01	0.01
N78	0.00	0.00	0.00	0.00	0.00	0.00
N79	0.00	0.00	0.00	0.00	0.00	0.00
N80-N82	-0.01	-0.01	0.00	0.00	0.00	0.00
O	**-0.10**	**-0.07**	**-0.06**	**-0.05**	**-0.07**	**-0.05**
P	**-0.05**	**-0.04**	**-0.03**	**-0.02**	**-0.03**	**-0.03**
Q	**-0.05**	**-0.03**	**-0.03**	**-0.02**	**-0.02**	**-0.02**
Q86	-0.04	-0.03	-0.02	-0.02	-0.02	-0.02
Q87_Q88	-0.01	0.00	0.00	0.00	0.00	0.00
R	**-0.03**	**-0.03**	**-0.02**	**-0.01**	**-0.02**	**0.00**
R90-R90	-0.03	-0.03	-0.03	-0.01	-0.02	0.00
R93	0.00	0.00	0.00	0.00	0.00	0.00
S	**-0.01**	**-0.01**	**0.00**	**0.00**	**0.00**	**0.00**
S94	0.00	0.00	0.00	0.00	0.00	0.00
S95	0.00	0.00	0.00	0.00	0.00	0.00
S96	-0.01	-0.01	0.00	0.00	0.00	0.00
T	**-**	**-**	**-**	**-**	**-**	**0.00**
U	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
HH total	**1.60**	**1.31**	**1.05**	**0.84**	**0.97**	**0.71**
HH Transport	1.60	1.31	1.05	0.84	0.97	0.71

Emissions of NMVOC in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
HH Heating/cooling	-	-	-	-	-	-
HH Other	-	-	-	-	-	-

Emissions of SOx in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A-U 1-99	**-0.01**	**-0.01**	**0.00**	**0.00**	**0.00**	**0.00**
A	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
A01	0.00	0.00	0.00	0.00	0.00	0.00
A02	0.00	0.00	0.00	0.00	0.00	0.00
A03	0.00	0.00	0.00	0.00	0.00	0.00
B	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
C	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
C10-C12	0.00	0.00	0.00	0.00	0.00	0.00
C13-C15	0.00	0.00	0.00	0.00	0.00	0.00
C16-C18	0.00	0.00	0.00	0.00	0.00	0.00
C16	0.00	0.00	0.00	0.00	0.00	0.00
C17	0.00	0.00	0.00	0.00	0.00	0.00
C18	0.00	0.00	0.00	0.00	0.00	0.00
C19	0.00	0.00	0.00	0.00	0.00	0.00
C20	0.00	0.00	0.00	0.00	0.00	0.00
C21	0.00	0.00	0.00	0.00	0.00	0.00
C22_C23	0.00	0.00	0.00	0.00	0.00	0.00
C22	0.00	0.00	0.00	0.00	0.00	0.00
C23	0.00	0.00	0.00	0.00	0.00	0.00
C24_C25	0.00	0.00	0.00	0.00	0.00	0.00
C24	0.00	0.00	0.00	0.00	0.00	0.00
C25	0.00	0.00	0.00	0.00	0.00	0.00
C26	0.00	0.00	0.00	0.00	0.00	0.00
C27	0.00	0.00	0.00	0.00	0.00	0.00
C28	0.00	0.00	0.00	0.00	0.00	0.00
C29_C30	0.00	0.00	0.00	0.00	0.00	0.00
C29	0.00	0.00	0.00	0.00	0.00	0.00
C30	0.00	0.00	0.00	0.00	0.00	0.00
C31-C33	0.00	0.00	0.00	0.00	0.00	0.00
C31_C32	0.00	0.00	0.00	0.00	0.00	0.00
C33	0.00	0.00	0.00	0.00	0.00	0.00
D	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
E	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
E36	0.00	0.00	0.00	0.00	0.00	0.00
E37-E39	0.00	0.00	0.00	0.00	0.00	0.00
F	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
G	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
G45	0.00	0.00	0.00	0.00	0.00	0.00
G46	0.00	0.00	0.00	0.00	0.00	0.00
G47	0.00	0.00	0.00	0.00	0.00	0.00
H	**0.00**	**-0.01**	**0.00**	**0.00**	**0.00**	**0.00**
H49	0.00	-0.01	0.00	0.00	0.00	0.00
H50	0.00	0.00	0.00	0.00	0.00	0.00
H51	0.00	0.00	0.00	0.00	0.00	0.00
H52	0.00	0.00	0.00	0.00	0.00	0.00
H53	0.00	0.00	0.00	0.00	0.00	0.00
I	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
J	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
J58-J60	0.00	0.00	0.00	0.00	0.00	0.00
J58	0.00	0.00	0.00	0.00	0.00	0.00
J59_J60	0.00	0.00	0.00	0.00	0.00	0.00

Emissions of SOx in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
J61	0.00	0.00	0.00	0.00	0.00	0.00
J62_J63	0.00	0.00	0.00	0.00	0.00	0.00
K	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
K64	0.00	0.00	0.00	0.00	0.00	0.00
K65	0.00	0.00	0.00	0.00	0.00	0.00
K66	0.00	0.00	0.00	0.00	0.00	0.00
L	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
L68A	0.00	0.00	0.00	0.00	0.00	0.00
M	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
M69-M71	0.00	0.00	0.00	0.00	0.00	0.00
M69_M70	0.00	0.00	0.00	0.00	0.00	0.00
M71	0.00	0.00	0.00	0.00	0.00	0.00
M72	0.00	0.00	0.00	0.00	0.00	0.00
M73-M75	0.00	0.00	0.00	0.00	0.00	0.00
M73	0.00	0.00	0.00	0.00	0.00	0.00
M74_M75	0.00	0.00	0.00	0.00	0.00	0.00
N	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
N77	0.00	0.00	0.00	0.00	0.00	0.00
N78	0.00	0.00	0.00	0.00	0.00	0.00
N79	0.00	0.00	0.00	0.00	0.00	0.00
N80-N82	0.00	0.00	0.00	0.00	0.00	0.00
O	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
P	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Q	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Q86	0.00	0.00	0.00	0.00	0.00	0.00
Q87_Q88	0.00	0.00	0.00	0.00	0.00	0.00
R	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
R90-R90	0.00	0.00	0.00	0.00	0.00	0.00
R93	0.00	0.00	0.00	0.00	0.00	0.00
S	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
S94	0.00	0.00	0.00	0.00	0.00	0.00
S95	0.00	0.00	0.00	0.00	0.00	0.00
S96	0.00	0.00	0.00	0.00	0.00	0.00
T	**-**	**-**	**-**	**-**	**-**	**0.00**
U	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
HH total	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**
HH Transport	0.01	0.01	0.00	0.00	0.00	0.00
HH Heating/cooling	**-**	**-**	**-**	**-**	**-**	**-**
HH Other	**-**	**-**	**-**	**-**	**-**	**-**

Emissions of NH_3 in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A-U 1-99	**-0.12**	**-0.10**	**-0.06**	**-0.07**	**-0.05**	**-0.05**
A	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
A01	0.00	0.00	0.00	0.00	0.00	0.00
A02	0.00	0.00	0.00	0.00	0.00	0.00
A03	0.00	0.00	0.00	0.00	0.00	0.00
B	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
C	**-0.02**	**-0.02**	**-0.02**	**-0.02**	**-0.02**	**-0.01**
C10-C12	0.00	0.00	0.00	0.00	0.00	0.00
C13-C15	0.00	0.00	0.00	0.00	0.00	0.00
C16-C18	0.00	0.00	0.00	0.00	0.00	0.00
C16	0.00	0.00	0.00	0.00	0.00	0.00
C17	0.00	0.00	0.00	0.00	0.00	0.00
C18	0.00	0.00	0.00	0.00	0.00	0.00
C19	0.00	0.00	0.00	0.00	0.00	0.00

Emissions of NH_3 in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
C20	0.00	0.00	0.00	0.00	0.00	0.00
C21	0.00	0.00	0.00	0.00	0.00	0.00
C22_C23	0.00	0.00	0.00	0.00	0.00	0.00
C22	0.00	0.00	0.00	0.00	0.00	0.00
C23	0.00	0.00	0.00	0.00	0.00	0.00
C24_C25	-0.01	0.00	0.00	-0.01	0.00	0.00
C24	0.00	0.00	0.00	0.00	0.00	0.00
C25	0.00	0.00	0.00	0.00	0.00	0.00
C26	0.00	0.00	0.00	0.00	0.00	0.00
C27	0.00	0.00	0.00	0.00	0.00	0.00
C28	0.00	0.00	0.00	0.00	0.00	0.00
C29_C30	0.00	0.00	0.00	-0.01	0.00	0.00
C29	0.00	0.00	0.00	-0.01	0.00	0.00
C30	0.00	0.00	0.00	0.00	0.00	0.00
C31-C33	0.00	0.00	0.00	0.00	0.00	0.00
C31_C32	0.00	0.00	0.00	0.00	0.00	0.00
C33	0.00	0.00	0.00	0.00	0.00	0.00
D	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
E	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
E36	0.00	0.00	0.00	0.00	0.00	0.00
E37-E39	0.00	0.00	0.00	0.00	0.00	0.00
F	**-0.01**	**-0.01**	**0.00**	**0.00**	**0.00**	**0.00**
G	**-0.01**	**-0.01**	**0.00**	**0.00**	**0.00**	**0.00**
G45	0.00	0.00	0.00	0.00	0.00	0.00
G46	-0.01	0.00	0.00	0.00	0.00	0.00
G47	-0.01	0.00	0.00	0.00	0.00	0.00
H	**-0.02**	**-0.03**	**-0.01**	**-0.02**	**-0.01**	**-0.01**
H49	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01
H50	0.00	0.00	0.00	0.00	0.00	0.00
H51	0.00	0.00	0.00	0.00	0.00	0.00
H52	0.00	0.00	0.00	0.00	0.00	0.00
H53	0.00	0.00	0.00	0.00	0.00	0.00
I	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
J	**-0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
J58-J60	0.00	0.00	0.00	0.00	0.00	0.00
J58	0.00	0.00	0.00	0.00	0.00	0.00
J59_J60	0.00	0.00	0.00	0.00	0.00	0.00
J61	0.00	0.00	0.00	0.00	0.00	0.00
J62_J63	0.00	0.00	0.00	0.00	0.00	0.00
K	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
K64	0.00	0.00	0.00	0.00	0.00	0.00
K65	0.00	0.00	0.00	0.00	0.00	0.00
K66	0.00	0.00	0.00	0.00	0.00	0.00
L	**-0.01**	**-0.01**	**0.00**	**0.00**	**0.00**	**-0.01**
L68A	-0.01	-0.01	0.00	0.00	0.00	-0.01
M	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
M69-M71	0.00	0.00	0.00	0.00	0.00	0.00
M69_M70	0.00	0.00	0.00	0.00	0.00	0.00
M71	0.00	0.00	0.00	0.00	0.00	0.00
M72	0.00	0.00	0.00	0.00	0.00	0.00
M73-M75	0.00	0.00	0.00	0.00	0.00	0.00
M73	0.00	0.00	0.00	0.00	0.00	0.00
M74_M75	0.00	0.00	0.00	0.00	0.00	0.00
N	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
N77	0.00	0.00	0.00	0.00	0.00	0.00
N78	0.00	0.00	0.00	0.00	0.00	0.00
N79	0.00	0.00	0.00	0.00	0.00	0.00

Emissions of NH_3 in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
N80-N82	0.00	0.00	0.00	0.00	0.00	0.00
O	**-0.01**	**-0.01**	**0.00**	**-0.01**	**0.00**	**0.00**
P	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Q	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Q86	0.00	0.00	0.00	0.00	0.00	0.00
Q87_Q88	0.00	0.00	0.00	0.00	0.00	0.00
R	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
R90-R90	0.00	0.00	0.00	0.00	0.00	0.00
R93	0.00	0.00	0.00	0.00	0.00	0.00
S	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
S94	0.00	0.00	0.00	0.00	0.00	0.00
S95	0.00	0.00	0.00	0.00	0.00	0.00
S96	0.00	0.00	0.00	0.00	0.00	0.00
T	**-**	**-**	**-**	**-**	**-**	**0.00**
U	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
HH total	**0.12**	**0.10**	**0.06**	**0.07**	**0.05**	**0.05**
HH Transport	0.12	0.10	0.06	0.07	0.05	0.05
HH Heating/cooling	**-**	**-**	**-**	**-**	**-**	**-**
HH Other	**-**	**-**	**-**	**-**	**-**	**-**

Emissions of CO in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A-U 1-99	**-10.45**	**-8.71**	**-6.24**	**-4.16**	**-5.55**	**-3.00**
A	**-0.39**	**-0.35**	**-0.19**	**-0.18**	**-0.19**	**-0.07**
A01	-0.31	-0.28	-0.16	-0.14	-0.15	-0.05
A02	-0.08	-0.06	-0.03	-0.03	-0.03	-0.02
A03	0.00	-0.01	0.00	0.00	0.00	0.00
B	**-0.06**	**-0.04**	**-0.04**	**-0.02**	**-0.03**	**-0.01**
C	**-1.96**	**-1.68**	**-1.47**	**-1.05**	**-1.52**	**-0.66**
C10-C12	-0.11	-0.09	-0.02	-0.01	-0.02	-0.01
C13-C15	-0.07	-0.05	-0.04	-0.02	-0.04	-0.03
C16-C18	-0.15	-0.13	-0.08	-0.04	-0.06	-0.02
C16	-0.08	-0.08	-0.05	-0.02	-0.04	0.00
C17	-0.05	-0.04	-0.03	-0.02	-0.02	-0.01
C18	-0.02	-0.01	0.00	0.00	0.00	-0.01
C19	-0.03	-0.03	-0.13	-0.13	-0.19	-0.04
C20	-0.05	-0.03	-0.03	-0.02	-0.02	-0.02
C21	0.00	-0.01	-0.01	0.00	-0.01	0.00
C22_C23	-0.25	-0.22	-0.19	-0.14	-0.21	-0.09
C22	-0.16	-0.15	-0.13	-0.10	-0.16	-0.07
C23	-0.09	-0.07	-0.05	-0.04	-0.05	-0.02
C24_C25	-0.41	-0.37	-0.33	-0.25	-0.34	-0.12
C24	-0.15	-0.12	-0.12	-0.10	-0.16	-0.06
C25	-0.26	-0.25	-0.21	-0.15	-0.18	-0.06
C26	-0.11	-0.11	-0.08	-0.05	-0.06	-0.02
C27	-0.13	-0.10	-0.10	-0.06	-0.10	-0.04
C28	-0.14	-0.12	-0.08	-0.05	-0.07	-0.05
C29_C30	-0.36	-0.34	-0.33	-0.24	-0.36	-0.18
C29	-0.35	-0.33	-0.32	-0.23	-0.36	-0.18
C30	-0.02	-0.01	-0.01	0.00	0.00	0.00
C31-C33	-0.13	-0.09	-0.05	-0.03	-0.04	-0.02
C31_C32	-0.05	-0.03	-0.02	-0.02	-0.02	-0.01
C33	-0.08	-0.05	-0.03	-0.02	-0.02	-0.01
D	**-0.35**	**-0.27**	**-0.20**	**-0.13**	**-0.17**	**-0.08**
E	**-0.10**	**-0.06**	**-0.05**	**-0.03**	**-0.04**	**-0.03**
E36	-0.03	-0.02	-0.02	-0.01	-0.02	-0.01

Emissions of CO in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
E37-E39	-0.07	-0.04	-0.03	-0.01	-0.03	-0.02
F	**-0.68**	**-0.47**	**-0.32**	**-0.21**	**-0.29**	**-0.13**
G	**-0.92**	**-0.55**	**-0.24**	**-0.11**	**-0.11**	**0.00**
G45	-0.03	-0.01	0.01	0.00	0.03	0.04
G46	-0.45	-0.30	-0.16	-0.05	-0.04	-0.02
G47	-0.45	-0.23	-0.09	-0.07	-0.09	-0.02
H	**-2.58**	**-3.05**	**-2.15**	**-1.47**	**-1.77**	**-1.26**
H49	-2.64	-2.96	-2.11	-1.49	-1.77	-1.28
H50	0.00	0.00	0.00	0.00	0.00	0.00
H51	0.00	0.00	0.00	0.00	0.00	0.00
H52	0.10	-0.05	-0.01	0.04	0.02	0.03
H53	-0.04	-0.03	-0.02	-0.02	-0.02	-0.01
I	**-0.07**	**-0.04**	**-0.02**	**-0.01**	**-0.01**	**0.00**
J	**-0.38**	**-0.25**	**-0.18**	**-0.12**	**-0.18**	**-0.10**
J58-J60	-0.03	-0.02	-0.01	-0.01	-0.01	-0.01
J58	-0.02	-0.01	-0.01	-0.01	0.00	0.00
J59_J60	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
J61	-0.16	-0.12	-0.09	-0.05	-0.08	-0.04
J62_J63	-0.19	-0.11	-0.08	-0.06	-0.09	-0.05
K	**-0.36**	**-0.30**	**-0.26**	**-0.13**	**-0.18**	**-0.08**
K64	-0.29	-0.23	-0.20	-0.12	-0.12	-0.05
K65	-0.04	-0.03	-0.04	0.00	-0.04	-0.02
K66	-0.03	-0.03	-0.02	-0.01	-0.02	-0.01
L	**-0.78**	**-0.41**	**-0.31**	**-0.20**	**-0.30**	**-0.26**
L68A	-0.78	-0.41	-0.31	-0.20	-0.30	-0.26
M	**-0.27**	**-0.21**	**-0.09**	**-0.06**	**-0.08**	**-0.03**
M69-M71	-0.20	-0.16	-0.08	-0.06	-0.06	-0.02
M69_M70	-0.11	-0.11	-0.06	-0.04	-0.04	-0.01
M71	-0.09	-0.05	-0.02	-0.02	-0.02	-0.01
M72	-0.03	-0.01	-0.01	-0.01	-0.01	-0.01
M73-M75	-0.05	-0.04	-0.01	0.01	-0.01	0.00
M73	-0.03	-0.03	-0.01	0.00	-0.01	0.00
M74_M75	-0.02	-0.02	0.00	0.01	0.00	0.01
N	**-0.13**	**-0.06**	**0.02**	**0.02**	**0.06**	**0.06**
N77	-0.01	0.00	0.02	0.03	0.07	0.06
N78	-0.03	-0.02	-0.02	-0.01	-0.02	-0.01
N79	-0.01	-0.01	0.00	0.00	0.00	0.00
N80-N82	-0.08	-0.03	0.01	-0.01	0.00	0.00
O	**-0.61**	**-0.41**	**-0.31**	**-0.24**	**-0.35**	**-0.19**
P	**-0.29**	**-0.20**	**-0.15**	**-0.10**	**-0.15**	**-0.10**
Q	**-0.26**	**-0.18**	**-0.13**	**-0.10**	**-0.12**	**-0.07**
Q86	-0.23	-0.16	-0.12	-0.09	-0.11	-0.05
Q87_Q88	-0.03	-0.02	-0.02	-0.01	-0.01	-0.02
R	**-0.19**	**-0.15**	**-0.13**	**-0.02**	**-0.09**	**-0.01**
R90-R90	-0.18	-0.15	-0.13	-0.02	-0.09	-0.01
R93	-0.01	-0.01	0.00	0.00	0.00	0.00
S	**-0.06**	**-0.04**	**-0.02**	**-0.01**	**-0.01**	**0.00**
S94	0.00	0.00	0.00	0.00	0.00	0.00
S95	-0.01	-0.01	0.00	0.00	0.00	0.00
S96	-0.04	-0.03	-0.02	-0.01	-0.01	0.00
T	**-**	**-**	**-**	**-**	**-**	**0.00**
U	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
HH total	**10.45**	**8.71**	**6.24**	**4.16**	**5.55**	**3.00**
HH Transport	10.45	8.71	6.24	4.16	5.55	3.00
HH Heating/cooling	**-**	**-**	**-**	**-**	**-**	**-**
HH Other	**-**	**-**	**-**	**-**	**-**	**-**

Emissions of $PM_{2.5}$ in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A-U 1-99	**-0.30**	**-0.32**	**-0.23**	**-0.18**	**-0.18**	**-0.14**
A	**-0.01**	**-0.02**	**-0.01**	**-0.01**	**-0.01**	**-0.01**
A01	-0.01	-0.01	-0.01	-0.01	-0.01	0.00
A02	0.00	0.00	0.00	0.00	0.00	0.00
A03	0.00	0.00	0.00	0.00	0.00	0.00
B	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
C	**-0.08**	**-0.08**	**-0.09**	**-0.09**	**-0.09**	**-0.07**
C10-C12	0.00	0.00	0.00	0.00	0.00	0.00
C13-C15	0.00	0.00	0.00	0.00	0.00	0.00
C16-C18	-0.01	-0.01	0.00	0.00	0.00	0.00
C16	0.00	0.00	0.00	0.00	0.00	0.00
C17	0.00	0.00	0.00	0.00	0.00	0.00
C18	0.00	0.00	0.00	0.00	0.00	0.00
C19	0.00	0.00	-0.01	-0.01	-0.01	0.00
C20	0.00	0.00	0.00	0.00	0.00	0.00
C21	0.00	0.00	0.00	0.00	0.00	0.00
C22_C23	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
C22	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
C23	0.00	0.00	0.00	0.00	0.00	0.00
C24_C25	-0.02	-0.02	-0.02	-0.02	-0.02	-0.01
C24	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
C25	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
C26	0.00	-0.01	-0.01	0.00	0.00	0.00
C27	-0.01	0.00	-0.01	-0.01	-0.01	0.00
C28	-0.01	-0.01	0.00	0.00	0.00	-0.01
C29_C30	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02
C29	-0.01	-0.02	-0.02	-0.02	-0.02	-0.02
C30	0.00	0.00	0.00	0.00	0.00	0.00
C31-C33	-0.01	0.00	0.00	0.00	0.00	0.00
C31_C32	0.00	0.00	0.00	0.00	0.00	0.00
C33	0.00	0.00	0.00	0.00	0.00	0.00
D	**-0.01**	**-0.01**	**-0.01**	**-0.01**	**-0.01**	**-0.01**
E	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
E36	0.00	0.00	0.00	0.00	0.00	0.00
E37-E39	0.00	0.00	0.00	0.00	0.00	0.00
F	**-0.02**	**-0.02**	**-0.02**	**-0.02**	**-0.02**	**-0.01**
G	**-0.02**	**-0.02**	**-0.01**	**0.00**	**0.00**	**0.00**
G45	0.00	0.00	0.00	0.00	0.00	0.00
G46	-0.01	-0.01	-0.01	0.00	0.00	0.00
G47	-0.01	-0.01	0.00	0.00	0.00	0.00
H	**-0.01**	**-0.06**	**0.01**	**0.05**	**0.04**	**0.07**
H49	-0.03	-0.07	0.00	0.04	0.03	0.06
H50	0.00	0.00	0.00	0.00	0.00	0.00
H51	0.00	0.00	0.00	0.00	0.00	0.00
H52	0.02	0.00	0.01	0.01	0.01	0.01
H53	0.00	0.00	0.00	0.00	0.00	0.00
I	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
J	**-0.02**	**-0.01**	**-0.01**	**-0.01**	**-0.01**	**-0.01**
J58-J60	0.00	0.00	0.00	0.00	0.00	0.00
J58	0.00	0.00	0.00	0.00	0.00	0.00
J59_J60	0.00	0.00	0.00	0.00	0.00	0.00
J61	-0.01	-0.01	-0.01	0.00	-0.01	0.00
J62_J63	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
K	**-0.01**	**-0.01**	**-0.02**	**-0.01**	**-0.01**	**-0.01**
K64	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01

Emissions of $PM_{2.5}$ in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
K65	0.00	0.00	0.00	0.00	0.00	0.00
K66	0.00	0.00	0.00	0.00	0.00	0.00
L	**-0.03**	**-0.02**	**-0.02**	**-0.02**	**-0.02**	**-0.03**
L68A	-0.03	-0.02	-0.02	-0.02	-0.02	-0.03
M	**-0.01**	**-0.01**	**-0.01**	**-0.01**	**-0.01**	**-0.01**
M69-M71	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
M69_M70	0.00	0.00	0.00	0.00	0.00	0.00
M71	0.00	0.00	0.00	0.00	0.00	0.00
M72	0.00	0.00	0.00	0.00	0.00	0.00
M73-M75	0.00	0.00	0.00	0.00	0.00	0.00
M73	0.00	0.00	0.00	0.00	0.00	0.00
M74_M75	0.00	0.00	0.00	0.00	0.00	0.00
N	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**
N77	0.00	0.00	0.00	0.00	0.01	0.01
N78	0.00	0.00	0.00	0.00	0.00	0.00
N79	0.00	0.00	0.00	0.00	0.00	0.00
N80-N82	0.00	0.00	0.00	0.00	0.00	0.00
O	**-0.02**	**-0.02**	**-0.02**	**-0.02**	**-0.02**	**-0.02**
P	**-0.01**	**-0.01**	**-0.01**	**-0.01**	**-0.01**	**-0.01**
Q	**-0.01**	**-0.01**	**-0.01**	**-0.01**	**-0.01**	**-0.01**
Q86	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
Q87_Q88	0.00	0.00	0.00	0.00	0.00	0.00
R	**-0.01**	**-0.01**	**-0.01**	**0.00**	**-0.01**	**0.00**
R90-R90	-0.01	-0.01	-0.01	0.00	-0.01	0.00
R93	0.00	0.00	0.00	0.00	0.00	0.00
S	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
S94	0.00	0.00	0.00	0.00	0.00	0.00
S95	0.00	0.00	0.00	0.00	0.00	0.00
S96	0.00	0.00	0.00	0.00	0.00	0.00
T	**-**	**-**	**-**	**-**	**-**	**0.00**
U	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
HH total	**0.30**	**0.32**	**0.23**	**0.18**	**0.18**	**0.14**
HH Transport	0.30	0.32	0.23	0.18	0.18	0.14
HH Heating/cooling	**-**	**-**	**-**	**-**	**-**	**-**
HH Other	**-**	**-**	**-**	**-**	**-**	**-**

Emissions of PM_{10} in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A-U 1-99	**-0.33**	**-0.39**	**-0.26**	**-0.20**	**-0.19**	**-0.15**
A	**-0.02**	**-0.02**	**-0.01**	**-0.02**	**-0.01**	**-0.01**
A01	-0.02	-0.02	-0.01	-0.02	-0.01	-0.01
A02	0.00	0.00	0.00	0.00	0.00	0.00
A03	0.00	0.00	0.00	0.00	0.00	0.00
B	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
C	**-0.11**	**-0.12**	**-0.13**	**-0.14**	**-0.15**	**-0.12**
C10-C12	0.00	0.00	0.00	0.00	0.00	0.00
C13-C15	0.00	0.00	0.00	0.00	0.00	-0.01
C16-C18	-0.01	-0.01	-0.01	0.00	-0.01	0.00
C16	0.00	0.00	0.00	0.00	0.00	0.00
C17	0.00	0.00	0.00	0.00	0.00	0.00
C18	0.00	0.00	0.00	0.00	0.00	0.00
C19	0.00	0.00	-0.01	-0.02	-0.02	-0.01
C20	0.00	0.00	0.00	0.00	0.00	0.00
C21	0.00	0.00	0.00	0.00	0.00	0.00
C22_C23	-0.01	-0.02	-0.02	-0.02	-0.02	-0.02
C22	-0.01	-0.01	-0.01	-0.01	-0.02	-0.01

Emissions of PM_{10} in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
C23	0.00	0.00	0.00	0.00	0.00	0.00
C24_C25	-0.02	-0.03	-0.03	-0.04	-0.03	-0.02
C24	-0.01	-0.01	-0.01	-0.01	-0.02	-0.01
C25	-0.01	-0.02	-0.02	-0.02	-0.02	-0.01
C26	-0.01	-0.01	-0.01	-0.01	-0.01	0.00
C27	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
C28	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
C29_C30	-0.02	-0.02	-0.03	-0.03	-0.04	-0.03
C29	-0.02	-0.02	-0.03	-0.03	-0.04	-0.03
C30	0.00	0.00	0.00	0.00	0.00	0.00
C31-C33	-0.01	-0.01	0.00	0.00	0.00	0.00
C31_C32	0.00	0.00	0.00	0.00	0.00	0.00
C33	0.00	0.00	0.00	0.00	0.00	0.00
D	**-0.02**	**-0.02**	**-0.02**	**-0.02**	**-0.02**	**-0.01**
E	**-0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
E36	0.00	0.00	0.00	0.00	0.00	0.00
E37-E39	0.00	0.00	0.00	0.00	0.00	0.00
F	**-0.03**	**-0.03**	**-0.03**	**-0.02**	**-0.02**	**-0.02**
G	**-0.03**	**-0.03**	**-0.01**	**-0.01**	**0.01**	**0.00**
G45	0.00	0.00	0.00	0.00	0.00	0.01
G46	-0.02	-0.01	-0.01	0.00	0.01	0.00
G47	-0.02	-0.01	0.00	-0.01	0.00	0.00
H	**0.09**	**0.00**	**0.12**	**0.18**	**0.17**	**0.20**
H49	0.07	0.00	0.11	0.17	0.15	0.19
H50	0.00	0.00	0.00	0.00	0.00	0.00
H51	0.00	0.00	0.00	0.00	0.00	0.00
H52	0.02	0.01	0.01	0.01	0.02	0.01
H53	0.00	0.00	0.00	0.00	0.00	0.00
I	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
J	**-0.02**	**-0.02**	**-0.02**	**-0.02**	**-0.02**	**-0.02**
J58-J60	0.00	0.00	0.00	0.00	0.00	0.00
J58	0.00	0.00	0.00	0.00	0.00	0.00
J59_J60	0.00	0.00	0.00	0.00	0.00	0.00
J61	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
J62_J63	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
K	**-0.02**	**-0.02**	**-0.03**	**-0.02**	**-0.02**	**-0.02**
K64	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01
K65	0.00	0.00	0.00	0.00	0.00	0.00
K66	0.00	0.00	0.00	0.00	0.00	0.00
L	**-0.05**	**-0.03**	**-0.03**	**-0.03**	**-0.03**	**-0.05**
L68A	-0.05	-0.03	-0.03	-0.03	-0.03	-0.05
M	**-0.01**	**-0.02**	**-0.01**	**-0.01**	**-0.01**	**-0.02**
M69-M71	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
M69_M70	0.00	-0.01	-0.01	-0.01	-0.01	-0.01
M71	-0.01	0.00	0.00	0.00	0.00	-0.01
M72	0.00	0.00	0.00	0.00	0.00	0.00
M73-M75	0.00	0.00	0.00	0.00	0.00	0.00
M73	0.00	0.00	0.00	0.00	0.00	0.00
M74_M75	0.00	0.00	0.00	0.00	0.00	0.00
N	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**
N77	0.00	0.00	0.00	0.01	0.01	0.01
N78	0.00	0.00	0.00	0.00	0.00	0.00
N79	0.00	0.00	0.00	0.00	0.00	0.00
N80-N82	0.00	0.00	0.00	0.00	0.00	0.00
O	**-0.04**	**-0.03**	**-0.03**	**-0.04**	**-0.04**	**-0.04**
P	**-0.02**	**-0.02**	**-0.02**	**-0.02**	**-0.02**	**-0.02**
Q	**-0.02**	**-0.01**	**-0.02**	**-0.02**	**-0.02**	**-0.02**

Emissions of PM_{10} in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Q86	-0.01	-0.01	-0.01	-0.02	-0.01	-0.01
Q87_Q88	0.00	0.00	0.00	0.00	0.00	0.00
R	**-0.01**	**-0.01**	**-0.01**	**0.00**	**-0.01**	**0.00**
R90-R90	-0.01	-0.01	-0.01	0.00	-0.01	0.00
R93	0.00	0.00	0.00	0.00	0.00	0.00
S	0.00	0.00	0.00	0.00	0.00	0.00
S94	0.00	0.00	0.00	0.00	0.00	0.00
S95	0.00	0.00	0.00	0.00	0.00	0.00
S96	0.00	0.00	0.00	0.00	0.00	0.00
T	**-**	**-**	**-**	**-**	**-**	**0.00**
U	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
HH total	**0.33**	**0.39**	**0.26**	**0.20**	**0.19**	**0.15**
HH Transport	0.33	0.39	0.26	0.20	0.19	0.15
HH Heating/cooling	-	-	-	-	-	-
HH Other	-	-	-	-	-	-

ANNEX II: AEA MODULE FOR EMISSIONS OF ROAD TRANSPORT

The methodology of allocation of road transport emissions into the NACE rev.2 has improved since the reporting of Deliverable D1.2: AEA modules on 29th April 2022. The new set of data for road transport is available in the following table. This data set was used to compile the official report of the AEA Questionnaire 2022 for the Slovak Republic, which was submitted to EUROSTAT on September 30th, 2022. The Questionnaire for all sectors is available on the official website of the OEaB.

Tab. AII. 1: *Emissions of road transport allocated to NACE rev. 2 categories using the new methodology*[2]

Emissions of CO_2 in Gg						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A-U 1-99	**2 288.91**	**1 866.69**	**2 854.56**	**3 124.07**	**3 278.83**	**3 505.87**
A	**36.96**	**32.18**	**52.95**	**46.05**	**54.87**	**58.80**
A01	25.46	22.22	35.07	29.57	33.17	42.96
A02	11.43	9.88	17.76	16.36	21.54	15.66
A03	0.07	0.09	0.11	0.12	0.17	0.18
B	**3.66**	**1.08**	**2.80**	**2.43**	**1.83**	**1.52**
C	**89.46**	**99.25**	**149.50**	**161.49**	**171.74**	**189.30**
C10-C12	20.00	16.40	34.55	26.67	30.90	31.36
C13-C15	3.02	3.99	5.14	6.19	6.04	6.33
C16-C18	15.54	15.45	20.96	35.81	28.34	36.37
C16	13.23	12.61	16.81	31.83	23.80	29.14
C17	0.62	0.78	1.14	1.08	1.42	1.51
C18	1.69	2.06	3.01	2.90	3.13	5.72
C19	0.07	0.02	0.08	0.07	0.05	0.05
C20	1.08	1.78	2.00	1.94	2.36	3.18
C21	0.17	0.22	0.29	0.28	0.28	0.31
C22_C23	10.89	10.82	17.17	15.88	22.17	20.74
C22	4.82	4.42	8.08	6.35	6.97	7.72
C23	6.07	6.40	9.08	9.53	15.20	13.03
C24_C25	20.39	24.07	35.92	34.56	38.85	46.69
C24	3.10	2.02	3.46	2.60	3.58	2.55
C25	17.29	22.06	32.45	31.96	35.27	44.14
C26	1.07	1.58	1.87	1.96	2.37	3.03
C27	2.76	3.11	4.33	5.30	7.51	7.04
C28	3.78	7.57	6.05	13.42	8.88	11.12
C29_C30	2.15	3.30	2.68	2.81	4.56	3.91
C29	1.68	1.84	2.16	2.22	3.66	3.26
C30	0.47	1.46	0.52	0.59	0.91	0.65
C31-C33	8.53	10.91	18.48	16.61	19.43	19.17
C31_C32	3.77	4.39	9.14	6.73	7.73	7.81
C33	4.76	6.53	9.33	9.88	11.70	11.36
D	**1.07**	**1.61**	**2.11**	**2.28**	**3.10**	**3.16**
E	**6.62**	**6.20**	**9.14**	**11.78**	**11.03**	**13.41**
E36	2.36	1.94	3.03	3.03	3.51	3.34
E37-E39	4.25	4.26	6.11	8.75	7.52	10.08
F	**82.58**	**91.82**	**129.09**	**142.60**	**155.60**	**168.33**
G	**234.31**	**223.14**	**308.85**	**368.57**	**412.58**	**461.77**
G45	31.91	27.91	40.04	40.04	58.74	78.00
G46	116.04	106.09	133.98	182.12	196.00	205.88

[2] Zero values are categories with no emissions

Emissions of CO_2 in Gg						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
G47	86.36	89.14	134.83	146.40	157.83	177.89
H	**1 603.92**	**1 135.20**	**1 816.32**	**1 937.67**	**1 909.74**	**2 002.09**
H49	1 479.97	1 053.83	1 692.96	1 806.18	1 747.61	1 861.60
H50	0.07	0.10	0.82	0.13	0.14	0.65
H51	0.07	0.10	0.13	0.18	0.21	0.23
H52	118.95	78.55	112.53	124.67	150.19	130.20
H53	4.85	2.62	9.89	6.51	11.59	9.41
I	**18.71**	**25.63**	**26.82**	**32.44**	**35.01**	**42.02**
J	**15.28**	**21.83**	**31.72**	**35.43**	**39.05**	**48.61**
J58-J60	3.51	4.56	6.16	6.75	7.42	7.88
J58	1.65	2.14	2.94	3.28	3.47	3.70
J59_J60	1.85	2.41	3.22	3.47	3.94	4.18
J61	1.10	1.99	2.84	3.17	3.44	3.70
J62_J63	10.67	15.28	22.72	25.51	28.20	37.03
K	**4.17**	**6.43**	**9.03**	**14.97**	**24.49**	**30.22**
K64	1.98	3.31	4.79	10.25	19.36	25.04
K65	0.16	0.41	0.59	0.71	0.83	0.69
K66	2.03	2.71	3.64	4.01	4.31	4.49
L	**23.02**	**26.53**	**34.33**	**43.21**	**51.08**	**54.00**
L68A	23.02	26.53	34.33	43.21	51.08	54.00
M	**72.12**	**83.41**	**112.95**	**132.08**	**148.72**	**163.19**
M69-M71	49.82	63.53	78.82	97.49	115.19	122.70
M69_M70	37.44	46.29	54.93	70.83	85.03	91.12
M71	12.38	17.24	23.89	26.66	30.16	31.59
M72	0.62	0.93	1.27	1.31	1.36	1.51
M73-M75	21.67	18.96	32.87	33.28	32.16	38.97
M73	11.81	9.65	18.74	17.11	18.26	20.55
M74_M75	9.87	9.31	14.12	16.17	13.91	18.42
N	**55.04**	**61.70**	**98.87**	**115.61**	**177.75**	**178.94**
N77	23.27	21.40	36.84	57.12	80.25	95.11
N78	1.85	1.93	2.82	2.99	3.34	3.83
N79	3.74	4.00	7.56	6.05	9.71	8.33
N80-N82	26.18	34.37	51.65	49.46	84.45	71.67
O	**3.96**	**4.62**	**5.99**	**6.22**	**6.22**	**5.76**
P	**6.22**	**8.01**	**10.79**	**12.02**	**12.60**	**16.56**
Q	**15.05**	**20.57**	**28.39**	**31.16**	**34.42**	**35.84**
Q86	13.88	19.12	26.49	29.15	32.27	33.58
Q87_Q88	1.17	1.45	1.91	2.02	2.15	2.26
R	**5.89**	**7.25**	**9.92**	**11.51**	**12.77**	**11.90**
R90-R90	1.90	2.61	3.32	3.66	3.92	4.55
R93	3.98	4.64	6.61	7.85	8.85	7.35
S	**10.61**	**9.95**	**14.57**	**16.12**	**15.83**	**20.03**
S94	3.06	3.40	4.61	4.52	4.66	4.80
S95	1.61	2.10	2.82	4.51	3.36	4.94
S96	5.94	4.45	7.14	7.08	7.81	10.29
T	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
U	**0.25**	**0.28**	**0.43**	**0.44**	**0.37**	**0.42**
HH total	**3 926.29**	**4 400.75**	**4 076.40**	**3 939.63**	**3 903.90**	**3 832.14**
HH Transport	3 926.29	4 400.75	4 076.40	3 939.63	3 903.90	3 832.14
HH Heating/cooling	0.00	0.00	0.00	0.00	0.00	0.00
HH Other	0.00	0.00	0.00	0.00	0.00	0.00

Emissions of bio CO_2 in Gg						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A-U 1-99	**120.21**	**104.25**	**162.35**	**207.19**	**227.43**	**246.73**
A	**1.90**	**1.77**	**2.98**	**2.95**	**3.74**	**4.08**

Emissions of bio CO_2 in Gg						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A01	1.32	1.23	1.98	1.90	2.26	3.00
A02	0.58	0.54	0.99	1.04	1.47	1.07
A03	0.00	0.00	0.01	0.01	0.01	0.01
B	**0.20**	**0.06**	**0.16**	**0.16**	**0.13**	**0.11**
C	**4.54**	**5.45**	**8.32**	**10.34**	**11.57**	**13.00**
C10-C12	1.05	0.92	1.98	1.76	2.14	2.21
C13-C15	0.14	0.21	0.27	0.38	0.39	0.41
C16-C18	0.79	0.85	1.16	2.35	1.92	2.53
C16	0.68	0.70	0.94	2.11	1.62	2.03
C17	0.03	0.04	0.06	0.07	0.10	0.10
C18	0.08	0.11	0.16	0.17	0.20	0.39
C19	0.00	0.00	0.00	0.00	0.00	0.00
C20	0.05	0.10	0.11	0.12	0.16	0.22
C21	0.01	0.01	0.02	0.02	0.02	0.02
C22_C23	0.57	0.60	0.97	1.02	1.52	1.43
C22	0.25	0.24	0.45	0.40	0.46	0.52
C23	0.32	0.36	0.51	0.62	1.06	0.91
C24_C25	1.02	1.31	1.97	2.15	2.57	3.17
C24	0.16	0.11	0.19	0.17	0.24	0.17
C25	0.85	1.20	1.78	1.99	2.32	3.00
C26	0.05	0.09	0.10	0.12	0.15	0.20
C27	0.14	0.17	0.24	0.34	0.51	0.48
C28	0.19	0.42	0.33	0.89	0.60	0.77
C29_C30	0.11	0.19	0.15	0.18	0.32	0.27
C29	0.09	0.10	0.12	0.14	0.25	0.22
C30	0.02	0.08	0.03	0.04	0.06	0.05
C31-C33	0.41	0.58	1.01	1.02	1.27	1.28
C31_C32	0.18	0.23	0.50	0.40	0.50	0.52
C33	0.23	0.35	0.51	0.61	0.78	0.77
D	**0.05**	**0.09**	**0.11**	**0.14**	**0.20**	**0.21**
E	**0.34**	**0.34**	**0.51**	**0.76**	**0.75**	**0.93**
E36	0.12	0.10	0.16	0.19	0.23	0.23
E37-E39	0.22	0.24	0.34	0.58	0.51	0.71
F	**4.17**	**5.04**	**7.15**	**9.11**	**10.47**	**11.54**
G	**12.03**	**12.29**	**17.15**	**23.71**	**27.97**	**31.90**
G45	1.64	1.53	2.21	2.52	3.96	5.38
G46	6.01	5.88	7.46	11.85	13.39	14.29
G47	4.39	4.88	7.48	9.35	10.61	12.23
H	**85.71**	**64.38**	**105.37**	**132.38**	**135.99**	**144.24**
H49	79.06	59.73	98.19	123.44	124.47	134.17
H50	0.00	0.01	0.05	0.01	0.01	0.05
H51	0.00	0.01	0.01	0.01	0.01	0.02
H52	6.38	4.49	6.56	8.49	10.68	9.36
H53	0.26	0.15	0.57	0.43	0.82	0.65
I	**0.92**	**1.39**	**1.43**	**1.99**	**2.27**	**2.81**
J	**0.71**	**1.15**	**1.68**	**2.11**	**2.49**	**3.23**
J58-J60	0.16	0.24	0.32	0.40	0.47	0.51
J58	0.08	0.11	0.15	0.19	0.22	0.24
J59_J60	0.09	0.13	0.17	0.21	0.25	0.28
J61	0.05	0.11	0.15	0.20	0.23	0.25
J62_J63	0.50	0.81	1.20	1.51	1.79	2.46
K	**0.20**	**0.34**	**0.48**	**0.92**	**1.61**	**2.04**
K64	0.10	0.18	0.26	0.65	1.29	1.70
K65	0.01	0.02	0.03	0.04	0.05	0.05
K66	0.09	0.14	0.19	0.23	0.27	0.29
L	**1.16**	**1.45**	**1.88**	**2.73**	**3.43**	**3.69**
L68A	1.16	1.45	1.88	2.73	3.43	3.69

Emissions of bio CO_2 in Gg						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
M	**3.53**	**4.46**	**6.01**	**8.00**	**9.61**	**10.85**
M69-M71	2.42	3.41	4.17	5.89	7.46	8.15
M69_M70	1.85	2.50	2.92	4.32	5.55	6.09
M71	0.57	0.91	1.25	1.57	1.91	2.06
M72	0.03	0.05	0.07	0.08	0.09	0.10
M73-M75	1.08	1.01	1.78	2.03	2.06	2.60
M73	0.59	0.51	1.01	1.03	1.17	1.36
M74_M75	0.49	0.50	0.76	1.00	0.89	1.24
N	**2.80**	**3.38**	**5.51**	**7.40**	**12.10**	**12.23**
N77	1.22	1.20	2.10	3.76	5.50	6.54
N78	0.09	0.10	0.15	0.19	0.22	0.26
N79	0.20	0.22	0.43	0.40	0.68	0.59
N80-N82	1.28	1.86	2.82	3.04	5.70	4.85
O	**0.16**	**0.22**	**0.27**	**0.30**	**0.35**	**0.34**
P	**0.28**	**0.41**	**0.55**	**0.68**	**0.76**	**1.06**
Q	**0.70**	**1.07**	**1.46**	**1.79**	**2.13**	**2.30**
Q86	0.65	1.00	1.37	1.68	2.00	2.16
Q87_Q88	0.05	0.07	0.09	0.11	0.13	0.14
R	**0.29**	**0.39**	**0.54**	**0.72**	**0.85**	**0.80**
R90-R90	0.09	0.14	0.17	0.22	0.25	0.30
R93	0.20	0.25	0.36	0.50	0.60	0.50
S	**0.51**	**0.52**	**0.76**	**0.96**	**1.00**	**1.32**
S94	0.14	0.17	0.23	0.26	0.29	0.31
S95	0.08	0.11	0.15	0.28	0.21	0.33
S96	0.30	0.24	0.38	0.43	0.50	0.69
T	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
U	**0.01**	**0.02**	**0.02**	**0.03**	**0.02**	**0.03**
HH total	**172.02**	**226.21**	**200.78**	**215.63**	**233.79**	**238.36**
HH Transport	172.02	226.21	200.78	215.63	233.79	238.36
HH Heating/cooling	0.00	0.00	0.00	0.00	0.00	0.00
HH Other	0.00	0.00	0.00	0.00	0.00	0.00

Emissions of CH_4 in Mg						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A-U 1-99	**81.78**	**62.08**	**85.57**	**65.90**	**73.69**	**60.22**
A	**1.23**	**0.92**	**1.34**	**0.90**	**1.29**	**0.99**
A01	0.85	0.63	0.89	0.58	0.79	0.71
A02	0.38	0.29	0.45	0.32	0.51	0.28
A03	0.00	0.00	0.00	0.00	0.00	0.00
B	**0.10**	**0.02**	**0.06**	**0.04**	**0.03**	**0.02**
C	**2.69**	**2.45**	**3.39**	**2.64**	**3.79**	**2.82**
C10-C12	0.59	0.40	0.78	0.47	0.61	0.47
C13-C15	0.11	0.12	0.14	0.11	0.17	0.11
C16-C18	0.49	0.40	0.50	0.63	0.64	0.56
C16	0.41	0.32	0.40	0.56	0.51	0.45
C17	0.01	0.02	0.02	0.01	0.03	0.02
C18	0.06	0.07	0.08	0.05	0.10	0.10
C19	0.00	0.00	0.00	0.00	0.00	0.00
C20	0.03	0.04	0.04	0.02	0.05	0.04
C21	0.00	0.00	0.01	0.00	0.01	0.00
C22_C23	0.31	0.25	0.37	0.26	0.45	0.32
C22	0.13	0.10	0.17	0.10	0.16	0.13
C23	0.18	0.15	0.20	0.16	0.28	0.20
C24_C25	0.61	0.60	0.83	0.55	0.94	0.69
C24	0.09	0.05	0.08	0.04	0.08	0.04
C25	0.52	0.55	0.75	0.51	0.85	0.65
C26	0.04	0.04	0.05	0.03	0.07	0.05

Emissions of CH_4 in Mg						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
C27	0.07	0.06	0.08	0.07	0.14	0.09
C28	0.10	0.15	0.11	0.20	0.16	0.14
C29_C30	0.05	0.06	0.04	0.03	0.07	0.05
C29	0.04	0.03	0.03	0.02	0.06	0.04
C30	0.01	0.03	0.01	0.01	0.01	0.01
C31-C33	0.28	0.31	0.45	0.27	0.50	0.30
C31_C32	0.13	0.14	0.24	0.12	0.23	0.14
C33	0.15	0.17	0.22	0.15	0.27	0.16
D	**0.05**	**0.05**	**0.06**	**0.04**	**0.08**	**0.05**
E	**0.21**	**0.17**	**0.23**	**0.21**	**0.26**	**0.21**
E36	0.08	0.06	0.09	0.06	0.10	0.05
E37-E39	0.13	0.11	0.14	0.15	0.16	0.15
F	**2.57**	**2.32**	**3.00**	**2.39**	**3.52**	**2.54**
G	**7.28**	**5.74**	**7.50**	**6.51**	**9.33**	**7.33**
G45	1.05	0.80	1.08	0.80	1.45	1.36
G46	3.47	2.56	3.09	3.08	4.13	3.12
G47	2.77	2.37	3.33	2.63	3.75	2.86
H	**59.62**	**42.18**	**59.35**	**44.86**	**40.47**	**36.11**
H49	56.02	40.34	56.60	42.46	37.65	33.95
H50	0.00	0.00	0.02	0.00	0.00	0.01
H51	0.00	0.00	0.00	0.00	0.00	0.00
H52	3.45	1.76	2.49	2.27	2.60	1.97
H53	0.15	0.07	0.23	0.13	0.22	0.19
I	**0.67**	**0.75**	**0.78**	**0.64**	**1.02**	**0.77**
J	**0.51**	**0.62**	**0.82**	**0.60**	**1.13**	**0.80**
J58-J60	0.12	0.14	0.17	0.13	0.23	0.14
J58	0.07	0.07	0.09	0.07	0.12	0.07
J59_J60	0.06	0.07	0.08	0.06	0.11	0.07
J61	0.03	0.04	0.05	0.04	0.07	0.04
J62_J63	0.36	0.44	0.60	0.43	0.82	0.62
K	**0.15**	**0.17**	**0.21**	**0.19**	**0.56**	**0.37**
K64	0.06	0.06	0.08	0.11	0.39	0.27
K65	0.01	0.01	0.01	0.01	0.02	0.01
K66	0.09	0.10	0.12	0.08	0.15	0.08
L	**0.69**	**0.66**	**0.80**	**0.73**	**1.17**	**0.86**
L68A	0.69	0.66	0.80	0.73	1.17	0.86
M	**2.37**	**2.41**	**3.06**	**2.38**	**4.25**	**2.83**
M69-M71	1.64	1.79	2.13	1.75	3.26	2.13
M69_M70	1.19	1.26	1.45	1.26	2.33	1.56
M71	0.45	0.53	0.68	0.48	0.93	0.57
M72	0.02	0.03	0.04	0.02	0.04	0.03
M73-M75	0.71	0.58	0.89	0.61	0.95	0.68
M73	0.37	0.30	0.50	0.31	0.53	0.35
M74_M75	0.34	0.29	0.39	0.31	0.42	0.32
N	**1.76**	**1.58**	**2.33**	**1.83**	**3.59**	**2.49**
N77	0.70	0.45	0.73	0.74	1.35	1.14
N78	0.06	0.06	0.08	0.06	0.09	0.06
N79	0.13	0.12	0.21	0.15	0.22	0.15
N80-N82	0.87	0.95	1.31	0.87	1.93	1.14
O	**0.27**	**0.28**	**0.35**	**0.23**	**0.39**	**0.21**
P	**0.39**	**0.44**	**0.57**	**0.46**	**0.65**	**0.49**
Q	**0.53**	**0.66**	**0.86**	**0.59**	**1.18**	**0.68**
Q86	0.46	0.59	0.77	0.53	1.08	0.62
Q87_Q88	0.06	0.07	0.09	0.06	0.10	0.06
R	**0.25**	**0.26**	**0.33**	**0.27**	**0.38**	**0.25**
R90-R90	0.08	0.09	0.10	0.08	0.13	0.08
R93	0.17	0.17	0.23	0.19	0.25	0.16

Emissions of CH_4 in Mg						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
S	**0.43**	**0.40**	**0.52**	**0.39**	**0.58**	**0.42**
S94	0.18	0.18	0.22	0.15	0.23	0.15
S95	0.06	0.07	0.08	0.08	0.10	0.08
S96	0.20	0.15	0.22	0.15	0.26	0.19
T	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
U	**0.01**	**0.01**	**0.01**	**0.00**	**0.01**	**0.00**
HH total	**287.84**	**280.75**	**235.77**	**160.47**	**225.83**	**142.58**
HH Transport	287.84	280.75	235.77	160.47	225.83	142.58
HH Heating/cooling	0.00	0.00	0.00	0.00	0.00	0.00
HH Other	0.00	0.00	0.00	0.00	0.00	0.00

Emissions of N_2O in Mg						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A-U 1-99	**89.54**	**73.04**	**118.08**	**135.54**	**145.31**	**156.25**
A	**1.40**	**1.20**	**2.15**	**1.81**	**2.30**	**2.49**
A01	0.98	0.85	1.44	1.17	1.37	1.88
A02	0.42	0.35	0.70	0.64	0.92	0.60
A03	0.00	0.00	0.00	0.00	0.01	0.01
B	**0.15**	**0.04**	**0.12**	**0.10**	**0.07**	**0.06**
C	**3.27**	**3.61**	**5.73**	**6.15**	**6.57**	**7.25**
C10-C12	0.80	0.65	1.52	1.16	1.39	1.41
C13-C15	0.10	0.13	0.17	0.20	0.18	0.19
C16-C18	0.58	0.57	0.79	1.52	1.13	1.51
C16	0.50	0.47	0.65	1.40	0.98	1.23
C17	0.02	0.03	0.04	0.04	0.05	0.05
C18	0.05	0.07	0.10	0.09	0.09	0.22
C19	0.00	0.00	0.00	0.00	0.00	0.00
C20	0.04	0.07	0.07	0.06	0.09	0.13
C21	0.01	0.01	0.01	0.01	0.01	0.01
C22_C23	0.42	0.41	0.69	0.61	0.93	0.81
C22	0.18	0.16	0.32	0.22	0.23	0.25
C23	0.24	0.25	0.37	0.40	0.69	0.56
C24_C25	0.71	0.83	1.30	1.15	1.32	1.65
C24	0.12	0.07	0.13	0.09	0.14	0.08
C25	0.59	0.76	1.16	1.05	1.17	1.57
C26	0.03	0.05	0.06	0.06	0.07	0.10
C27	0.10	0.11	0.15	0.18	0.29	0.26
C28	0.14	0.30	0.22	0.58	0.34	0.45
C29_C30	0.08	0.13	0.09	0.09	0.18	0.13
C29	0.06	0.07	0.08	0.07	0.14	0.11
C30	0.02	0.06	0.02	0.02	0.04	0.02
C31-C33	0.28	0.36	0.66	0.52	0.64	0.60
C31_C32	0.12	0.14	0.34	0.21	0.25	0.24
C33	0.16	0.22	0.32	0.32	0.39	0.36
D	**0.03**	**0.05**	**0.07**	**0.07**	**0.10**	**0.10**
E	**0.25**	**0.23**	**0.35**	**0.48**	**0.44**	**0.56**
E36	0.09	0.07	0.11	0.11	0.14	0.13
E37-E39	0.16	0.16	0.24	0.37	0.30	0.43
F	**2.95**	**3.28**	**4.73**	**5.18**	**5.74**	**6.11**
G	**8.83**	**8.26**	**11.82**	**14.53**	**16.62**	**18.87**
G45	1.17	0.98	1.46	1.40	2.32	3.19
G46	4.47	4.02	5.15	7.47	8.13	8.56
G47	3.19	3.26	5.21	5.66	6.17	7.12
H	**65.06**	**47.40**	**80.43**	**92.55**	**94.69**	**100.47**
H49	59.87	43.85	74.68	86.07	86.39	93.31
H50	0.00	0.00	0.04	0.00	0.00	0.03

Emissions of N_2O in Mg						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
H51	0.00	0.00	0.00	0.01	0.01	0.01
H52	5.00	3.44	5.26	6.18	7.72	6.70
H53	0.19	0.10	0.45	0.30	0.57	0.42
I	**0.64**	**0.91**	**0.89**	**1.09**	**1.17**	**1.47**
J	**0.46**	**0.67**	**1.02**	**1.06**	**1.15**	**1.58**
J58-J60	0.11	0.14	0.19	0.19	0.21	0.23
J58	0.05	0.07	0.09	0.10	0.10	0.10
J59_J60	0.06	0.07	0.10	0.10	0.12	0.12
J61	0.04	0.07	0.10	0.10	0.11	0.12
J62_J63	0.32	0.47	0.73	0.76	0.83	1.23
K	**0.13**	**0.21**	**0.30**	**0.48**	**0.73**	**0.98**
K64	0.07	0.12	0.17	0.35	0.58	0.83
K65	0.01	0.01	0.02	0.02	0.03	0.02
K66	0.06	0.08	0.11	0.11	0.12	0.12
L	**0.80**	**0.91**	**1.18**	**1.55**	**1.91**	**2.02**
L68A	0.80	0.91	1.18	1.55	1.91	2.02
M	**2.41**	**2.68**	**3.65**	**4.20**	**4.79**	**5.33**
M69-M71	1.63	2.05	2.45	3.06	3.77	4.00
M69_M70	1.25	1.52	1.70	2.28	2.86	3.06
M71	0.37	0.53	0.74	0.78	0.91	0.94
M72	0.02	0.03	0.04	0.04	0.04	0.04
M73-M75	0.76	0.60	1.16	1.10	0.98	1.29
M73	0.41	0.29	0.66	0.53	0.55	0.63
M74_M75	0.35	0.31	0.50	0.57	0.43	0.66
N	**1.95**	**2.14**	**3.65**	**4.17**	**6.74**	**6.36**
N77	0.92	0.81	1.49	2.31	2.92	3.40
N78	0.06	0.06	0.08	0.08	0.10	0.12
N79	0.10	0.11	0.23	0.16	0.37	0.29
N80-N82	0.87	1.17	1.85	1.62	3.36	2.55
O	**0.09**	**0.11**	**0.15**	**0.13**	**0.14**	**0.12**
P	**0.16**	**0.21**	**0.27**	**0.30**	**0.33**	**0.51**
Q	**0.43**	**0.59**	**0.82**	**0.82**	**0.91**	**0.94**
Q86	0.40	0.55	0.76	0.76	0.85	0.88
Q87_Q88	0.03	0.04	0.06	0.05	0.06	0.06
R	**0.16**	**0.21**	**0.28**	**0.34**	**0.40**	**0.33**
R90-R90	0.05	0.08	0.09	0.10	0.11	0.13
R93	0.11	0.13	0.18	0.24	0.30	0.20
S	**0.35**	**0.31**	**0.48**	**0.51**	**0.48**	**0.67**
S94	0.09	0.10	0.14	0.12	0.13	0.13
S95	0.05	0.07	0.09	0.17	0.11	0.18
S96	0.21	0.14	0.25	0.22	0.25	0.36
T	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
U	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**
HH total	**117.14**	**149.91**	**125.63**	**113.42**	**119.52**	**111.29**
HH Transport	117.14	149.91	125.63	113.42	119.52	111.29
HH Heating/cooling	0.00	0.00	0.00	0.00	0.00	0.00
HH Other	0.00	0.00	0.00	0.00	0.00	0.00

Emissions of NO_x in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A-U 1-99	**11.67**	**7.25**	**10.74**	**10.42**	**9.85**	**9.78**
A	**0.17**	**0.11**	**0.19**	**0.14**	**0.16**	**0.16**
A01	0.12	0.08	0.12	0.09	0.10	0.12
A02	0.05	0.03	0.06	0.05	0.06	0.04
A03	0.00	0.00	0.00	0.00	0.00	0.00
B	**0.02**	**0.00**	**0.01**	**0.01**	**0.01**	**0.00**

Emissions of NO_x in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
C	**0.36**	**0.33**	**0.50**	**0.49**	**0.49**	**0.51**
C10-C12	0.10	0.06	0.13	0.09	0.09	0.09
C13-C15	0.01	0.01	0.01	0.02	0.02	0.02
C16-C18	0.07	0.05	0.07	0.11	0.08	0.10
C16	0.06	0.04	0.06	0.10	0.07	0.08
C17	0.00	0.00	0.00	0.00	0.00	0.00
C18	0.00	0.01	0.01	0.01	0.01	0.01
C19	0.00	0.00	0.00	0.00	0.00	0.00
C20	0.00	0.01	0.01	0.01	0.01	0.01
C21	0.00	0.00	0.00	0.00	0.00	0.00
C22_C23	0.05	0.04	0.06	0.05	0.06	0.05
C22	0.02	0.01	0.03	0.02	0.02	0.02
C23	0.03	0.02	0.03	0.03	0.04	0.03
C24_C25	0.07	0.08	0.12	0.10	0.11	0.13
C24	0.02	0.01	0.01	0.01	0.01	0.01
C25	0.06	0.07	0.10	0.09	0.10	0.12
C26	0.00	0.00	0.01	0.01	0.01	0.01
C27	0.01	0.01	0.01	0.02	0.02	0.02
C28	0.01	0.03	0.02	0.04	0.02	0.03
C29_C30	0.01	0.01	0.01	0.01	0.01	0.01
C29	0.01	0.01	0.01	0.01	0.01	0.01
C30	0.00	0.01	0.00	0.00	0.00	0.00
C31-C33	0.03	0.03	0.06	0.05	0.05	0.05
C31_C32	0.01	0.01	0.03	0.02	0.02	0.02
C33	0.01	0.02	0.03	0.03	0.03	0.03
D	**0.00**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**
E	**0.03**	**0.02**	**0.03**	**0.04**	**0.03**	**0.04**
E36	0.01	0.01	0.01	0.01	0.01	0.01
E37-E39	0.02	0.01	0.02	0.03	0.02	0.03
F	**0.33**	**0.30**	**0.43**	**0.44**	**0.45**	**0.47**
G	**1.05**	**0.76**	**1.03**	**1.13**	**1.17**	**1.23**
G45	0.15	0.10	0.14	0.13	0.17	0.21
G46	0.53	0.37	0.44	0.56	0.56	0.55
G47	0.37	0.30	0.45	0.44	0.44	0.47
H	**8.88**	**4.88**	**7.40**	**6.89**	**6.05**	**5.87**
H49	8.21	4.55	6.93	6.45	5.56	5.48
H50	0.00	0.00	0.00	0.00	0.00	0.00
H51	0.00	0.00	0.00	0.00	0.00	0.00
H52	0.65	0.32	0.43	0.42	0.45	0.36
H53	0.03	0.01	0.04	0.02	0.03	0.02
I	**0.07**	**0.08**	**0.08**	**0.09**	**0.09**	**0.11**
J	**0.04**	**0.06**	**0.09**	**0.09**	**0.10**	**0.12**
J58-J60	0.01	0.01	0.02	0.02	0.02	0.02
J58	0.00	0.01	0.01	0.01	0.01	0.01
J59_J60	0.01	0.01	0.01	0.01	0.01	0.01
J61	0.00	0.01	0.01	0.01	0.01	0.01
J62_J63	0.03	0.04	0.06	0.07	0.07	0.09
K	**0.01**	**0.02**	**0.03**	**0.04**	**0.06**	**0.07**
K64	0.01	0.01	0.01	0.03	0.05	0.06
K65	0.00	0.00	0.00	0.00	0.00	0.00
K66	0.00	0.01	0.01	0.01	0.01	0.01
L	**0.09**	**0.08**	**0.11**	**0.13**	**0.14**	**0.13**
L68A	0.09	0.08	0.11	0.13	0.14	0.13
M	**0.25**	**0.24**	**0.32**	**0.35**	**0.37**	**0.39**
M69-M71	0.17	0.18	0.21	0.26	0.29	0.29
M69_M70	0.13	0.14	0.15	0.19	0.21	0.22
M71	0.03	0.04	0.06	0.07	0.07	0.07

Emissions of NO_x in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
M72	0.00	0.00	0.00	0.00	0.00	0.00
M73-M75	0.08	0.05	0.10	0.09	0.08	0.10
M73	0.04	0.02	0.06	0.04	0.04	0.05
M74_M75	0.04	0.03	0.04	0.05	0.04	0.05
N	**0.24**	**0.21**	**0.34**	**0.36**	**0.51**	**0.45**
N77	0.12	0.08	0.13	0.18	0.23	0.23
N78	0.01	0.01	0.01	0.01	0.01	0.01
N79	0.02	0.02	0.04	0.03	0.04	0.03
N80-N82	0.09	0.11	0.16	0.14	0.23	0.18
O	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**
P	**0.02**	**0.03**	**0.04**	**0.04**	**0.04**	**0.05**
Q	**0.04**	**0.05**	**0.07**	**0.07**	**0.08**	**0.08**
Q86	0.03	0.05	0.06	0.07	0.07	0.07
Q87_Q88	0.00	0.00	0.00	0.00	0.01	0.01
R	**0.02**	**0.03**	**0.04**	**0.04**	**0.04**	**0.04**
R90-R90	0.01	0.01	0.01	0.01	0.01	0.01
R93	0.02	0.02	0.03	0.03	0.03	0.03
S	**0.04**	**0.03**	**0.05**	**0.05**	**0.04**	**0.05**
S94	0.01	0.01	0.02	0.01	0.01	0.01
S95	0.00	0.01	0.01	0.01	0.01	0.01
S96	0.03	0.01	0.02	0.02	0.02	0.03
T	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
U	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
HH total	**11.91**	**14.39**	**12.15**	**11.39**	**10.99**	**10.83**
HH Transport	11.91	14.39	12.15	11.39	10.99	10.83
HH Heating/cooling	0.00	0.00	0.00	0.00	0.00	0.00
HH Other	0.00	0.00	0.00	0.00	0.00	0.00

Emissions of NMVOC in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A-U 1-99	**0.52**	**0.41**	**0.57**	**0.48**	**0.58**	**0.50**
A	**0.01**	**0.01**	**0.02**	**0.01**	**0.01**	**0.01**
A01	0.01	0.01	0.01	0.01	0.01	0.01
A02	0.00	0.00	0.01	0.00	0.01	0.00
A03	0.00	0.00	0.00	0.00	0.00	0.00
B	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
C	**0.03**	**0.03**	**0.04**	**0.03**	**0.04**	**0.04**
C10-C12	0.00	0.00	0.01	0.00	0.01	0.00
C13-C15	0.00	0.00	0.00	0.00	0.00	0.00
C16-C18	0.01	0.00	0.01	0.01	0.01	0.01
C16	0.00	0.00	0.00	0.01	0.01	0.01
C17	0.00	0.00	0.00	0.00	0.00	0.00
C18	0.00	0.00	0.00	0.00	0.00	0.00
C19	0.00	0.00	0.00	0.00	0.00	0.00
C20	0.00	0.00	0.00	0.00	0.00	0.00
C21	0.00	0.00	0.00	0.00	0.00	0.00
C22_C23	0.00	0.00	0.00	0.00	0.00	0.00
C22	0.00	0.00	0.00	0.00	0.00	0.00
C23	0.00	0.00	0.00	0.00	0.00	0.00
C24_C25	0.01	0.01	0.01	0.01	0.01	0.01
C24	0.00	0.00	0.00	0.00	0.00	0.00
C25	0.01	0.01	0.01	0.01	0.01	0.01
C26	0.00	0.00	0.00	0.00	0.00	0.00
C27	0.00	0.00	0.00	0.00	0.00	0.00
C28	0.00	0.00	0.00	0.00	0.00	0.00
C29_C30	0.00	0.00	0.00	0.00	0.00	0.00

Emissions of NMVOC in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
C29	0.00	0.00	0.00	0.00	0.00	0.00
C30	0.00	0.00	0.00	0.00	0.00	0.00
C31-C33	0.00	0.00	0.01	0.00	0.01	0.00
C31_C32	0.00	0.00	0.00	0.00	0.00	0.00
C33	0.00	0.00	0.00	0.00	0.00	0.00
D	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
E	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
E36	0.00	0.00	0.00	0.00	0.00	0.00
E37-E39	0.00	0.00	0.00	0.00	0.00	0.00
F	**0.03**	**0.03**	**0.04**	**0.03**	**0.04**	**0.04**
G	**0.07**	**0.06**	**0.08**	**0.07**	**0.10**	**0.08**
G45	0.01	0.01	0.01	0.01	0.01	0.01
G46	0.03	0.03	0.03	0.03	0.04	0.03
G47	0.03	0.03	0.04	0.03	0.04	0.03
H	**0.28**	**0.18**	**0.27**	**0.23**	**0.22**	**0.19**
H49	0.26	0.17	0.25	0.21	0.20	0.18
H50	0.00	0.00	0.00	0.00	0.00	0.00
H51	0.00	0.00	0.00	0.00	0.00	0.00
H52	0.02	0.01	0.02	0.02	0.02	0.01
H53	0.00	0.00	0.00	0.00	0.00	0.00
I	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**
J	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**
J58-J60	0.00	0.00	0.00	0.00	0.00	0.00
J58	0.00	0.00	0.00	0.00	0.00	0.00
J59_J60	0.00	0.00	0.00	0.00	0.00	0.00
J61	0.00	0.00	0.00	0.00	0.00	0.00
J62_J63	0.00	0.01	0.01	0.01	0.01	0.01
K	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**
K64	0.00	0.00	0.00	0.00	0.00	0.00
K65	0.00	0.00	0.00	0.00	0.00	0.00
K66	0.00	0.00	0.00	0.00	0.00	0.00
L	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**
L68A	0.01	0.01	0.01	0.01	0.01	0.01
M	**0.03**	**0.03**	**0.04**	**0.03**	**0.05**	**0.04**
M69-M71	0.02	0.02	0.03	0.02	0.04	0.03
M69_M70	0.01	0.01	0.02	0.02	0.02	0.02
M71	0.01	0.01	0.01	0.01	0.01	0.01
M72	0.00	0.00	0.00	0.00	0.00	0.00
M73-M75	0.01	0.01	0.01	0.01	0.01	0.01
M73	0.00	0.00	0.01	0.00	0.01	0.00
M74_M75	0.00	0.00	0.00	0.00	0.00	0.00
N	**0.02**	**0.02**	**0.02**	**0.02**	**0.04**	**0.03**
N77	0.01	0.00	0.01	0.01	0.01	0.01
N78	0.00	0.00	0.00	0.00	0.00	0.00
N79	0.00	0.00	0.00	0.00	0.00	0.00
N80-N82	0.01	0.01	0.01	0.01	0.02	0.01
O	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**
P	**0.00**	**0.00**	**0.01**	**0.01**	**0.01**	**0.01**
Q	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**
Q86	0.01	0.01	0.01	0.01	0.01	0.01
Q87_Q88	0.00	0.00	0.00	0.00	0.00	0.00
R	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
R90-R90	0.00	0.00	0.00	0.00	0.00	0.00
R93	0.00	0.00	0.00	0.00	0.00	0.00
S	**0.01**	**0.00**	**0.01**	**0.01**	**0.01**	**0.01**
S94	0.00	0.00	0.00	0.00	0.00	0.00
S95	0.00	0.00	0.00	0.00	0.00	0.00

Emissions of NMVOC in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
S96	0.00	0.00	0.00	0.00	0.00	0.00
T	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
U	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
HH total	**4.84**	**4.14**	**4.15**	**3.14**	**4.02**	**3.11**
HH Transport	4.84	4.14	4.15	3.14	4.02	3.11
HH Heating/cooling	0.00	0.00	0.00	0.00	0.00	0.00
HH Other	0.00	0.00	0.00	0.00	0.00	0.00

Emissions of SO_x in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A-U 1-99	**0.01**	**0.01**	**0.01**	**0.01**	**0.02**	**0.02**
A	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
A01	0.00	0.00	0.00	0.00	0.00	0.00
A02	0.00	0.00	0.00	0.00	0.00	0.00
A03	0.00	0.00	0.00	0.00	0.00	0.00
B	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
C	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
C10-C12	0.00	0.00	0.00	0.00	0.00	0.00
C13-C15	0.00	0.00	0.00	0.00	0.00	0.00
C16-C18	0.00	0.00	0.00	0.00	0.00	0.00
C16	0.00	0.00	0.00	0.00	0.00	0.00
C17	0.00	0.00	0.00	0.00	0.00	0.00
C18	0.00	0.00	0.00	0.00	0.00	0.00
C19	0.00	0.00	0.00	0.00	0.00	0.00
C20	0.00	0.00	0.00	0.00	0.00	0.00
C21	0.00	0.00	0.00	0.00	0.00	0.00
C22_C23	0.00	0.00	0.00	0.00	0.00	0.00
C22	0.00	0.00	0.00	0.00	0.00	0.00
C23	0.00	0.00	0.00	0.00	0.00	0.00
C24_C25	0.00	0.00	0.00	0.00	0.00	0.00
C24	0.00	0.00	0.00	0.00	0.00	0.00
C25	0.00	0.00	0.00	0.00	0.00	0.00
C26	0.00	0.00	0.00	0.00	0.00	0.00
C27	0.00	0.00	0.00	0.00	0.00	0.00
C28	0.00	0.00	0.00	0.00	0.00	0.00
C29_C30	0.00	0.00	0.00	0.00	0.00	0.00
C29	0.00	0.00	0.00	0.00	0.00	0.00
C30	0.00	0.00	0.00	0.00	0.00	0.00
C31-C33	0.00	0.00	0.00	0.00	0.00	0.00
C31_C32	0.00	0.00	0.00	0.00	0.00	0.00
C33	0.00	0.00	0.00	0.00	0.00	0.00
D	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
E	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
E36	0.00	0.00	0.00	0.00	0.00	0.00
E37-E39	0.00	0.00	0.00	0.00	0.00	0.00
F	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
G	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
G45	0.00	0.00	0.00	0.00	0.00	0.00
G46	0.00	0.00	0.00	0.00	0.00	0.00
G47	0.00	0.00	0.00	0.00	0.00	0.00
H	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**
H49	0.01	0.01	0.01	0.01	0.01	0.01
H50	0.00	0.00	0.00	0.00	0.00	0.00
H51	0.00	0.00	0.00	0.00	0.00	0.00
H52	0.00	0.00	0.00	0.00	0.00	0.00
H53	0.00	0.00	0.00	0.00	0.00	0.00

Emissions of SO_x in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
I	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
J	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
J58-J60	0.00	0.00	0.00	0.00	0.00	0.00
J58	0.00	0.00	0.00	0.00	0.00	0.00
J59_J60	0.00	0.00	0.00	0.00	0.00	0.00
J61	0.00	0.00	0.00	0.00	0.00	0.00
J62_J63	0.00	0.00	0.00	0.00	0.00	0.00
K	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
K64	0.00	0.00	0.00	0.00	0.00	0.00
K65	0.00	0.00	0.00	0.00	0.00	0.00
K66	0.00	0.00	0.00	0.00	0.00	0.00
L	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
L68A	0.00	0.00	0.00	0.00	0.00	0.00
M	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
M69-M71	0.00	0.00	0.00	0.00	0.00	0.00
M69_M70	0.00	0.00	0.00	0.00	0.00	0.00
M71	0.00	0.00	0.00	0.00	0.00	0.00
M72	0.00	0.00	0.00	0.00	0.00	0.00
M73-M75	0.00	0.00	0.00	0.00	0.00	0.00
M73	0.00	0.00	0.00	0.00	0.00	0.00
M74_M75	0.00	0.00	0.00	0.00	0.00	0.00
N	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
N77	0.00	0.00	0.00	0.00	0.00	0.00
N78	0.00	0.00	0.00	0.00	0.00	0.00
N79	0.00	0.00	0.00	0.00	0.00	0.00
N80-N82	0.00	0.00	0.00	0.00	0.00	0.00
O	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
P	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Q	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Q86	0.00	0.00	0.00	0.00	0.00	0.00
Q87_Q88	0.00	0.00	0.00	0.00	0.00	0.00
R	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
R90-R90	0.00	0.00	0.00	0.00	0.00	0.00
R93	0.00	0.00	0.00	0.00	0.00	0.00
S	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
S94	0.00	0.00	0.00	0.00	0.00	0.00
S95	0.00	0.00	0.00	0.00	0.00	0.00
S96	0.00	0.00	0.00	0.00	0.00	0.00
T	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
U	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
HH total	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**
HH Transport	0.02	0.02	0.02	0.02	0.02	0.02
HH Heating/cooling	0.00	0.00	0.00	0.00	0.00	0.00
HH Other	0.00	0.00	0.00	0.00	0.00	0.00

NH_3 in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A-U 1-99	**0.04**	**0.04**	**0.05**	**0.07**	**0.07**	**0.08**
A	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
A01	0.00	0.00	0.00	0.00	0.00	0.00
A02	0.00	0.00	0.00	0.00	0.00	0.00
A03	0.00	0.00	0.00	0.00	0.00	0.00
B	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
C	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**
C10-C12	0.00	0.00	0.00	0.00	0.00	0.00
C13-C15	0.00	0.00	0.00	0.00	0.00	0.00
C16-C18	0.00	0.00	0.00	0.00	0.00	0.00

NH_3 in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
C16	0.00	0.00	0.00	0.00	0.00	0.00
C17	0.00	0.00	0.00	0.00	0.00	0.00
C18	0.00	0.00	0.00	0.00	0.00	0.00
C19	0.00	0.00	0.00	0.00	0.00	0.00
C20	0.00	0.00	0.00	0.00	0.00	0.00
C21	0.00	0.00	0.00	0.00	0.00	0.00
C22_C23	0.00	0.00	0.00	0.00	0.00	0.00
C22	0.00	0.00	0.00	0.00	0.00	0.00
C23	0.00	0.00	0.00	0.00	0.00	0.00
C24_C25	0.00	0.00	0.00	0.00	0.00	0.00
C24	0.00	0.00	0.00	0.00	0.00	0.00
C25	0.00	0.00	0.00	0.00	0.00	0.00
C26	0.00	0.00	0.00	0.00	0.00	0.00
C27	0.00	0.00	0.00	0.00	0.00	0.00
C28	0.00	0.00	0.00	0.00	0.00	0.00
C29_C30	0.00	0.00	0.00	0.00	0.00	0.00
C29	0.00	0.00	0.00	0.00	0.00	0.00
C30	0.00	0.00	0.00	0.00	0.00	0.00
C31-C33	0.00	0.00	0.00	0.00	0.00	0.00
C31_C32	0.00	0.00	0.00	0.00	0.00	0.00
C33	0.00	0.00	0.00	0.00	0.00	0.00
D	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
E	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
E36	0.00	0.00	0.00	0.00	0.00	0.00
E37-E39	0.00	0.00	0.00	0.00	0.00	0.00
F	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**
G	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**
G45	0.00	0.00	0.00	0.00	0.00	0.00
G46	0.00	0.00	0.00	0.00	0.01	0.01
G47	0.00	0.00	0.00	0.00	0.00	0.01
H	**0.02**	**0.02**	**0.03**	**0.03**	**0.03**	**0.03**
H49	0.02	0.01	0.02	0.03	0.03	0.03
H50	0.00	0.00	0.00	0.00	0.00	0.00
H51	0.00	0.00	0.00	0.00	0.00	0.00
H52	0.00	0.00	0.00	0.00	0.00	0.00
H53	0.00	0.00	0.00	0.00	0.00	0.00
I	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
J	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
J58-J60	0.00	0.00	0.00	0.00	0.00	0.00
J58	0.00	0.00	0.00	0.00	0.00	0.00
J59_J60	0.00	0.00	0.00	0.00	0.00	0.00
J61	0.00	0.00	0.00	0.00	0.00	0.00
J62_J63	0.00	0.00	0.00	0.00	0.00	0.00
K	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
K64	0.00	0.00	0.00	0.00	0.00	0.00
K65	0.00	0.00	0.00	0.00	0.00	0.00
K66	0.00	0.00	0.00	0.00	0.00	0.00
L	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
L68A	0.00	0.00	0.00	0.00	0.00	0.00
M	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**
M69-M71	0.00	0.00	0.00	0.00	0.00	0.00
M69_M70	0.00	0.00	0.00	0.00	0.00	0.00
M71	0.00	0.00	0.00	0.00	0.00	0.00
M72	0.00	0.00	0.00	0.00	0.00	0.00
M73-M75	0.00	0.00	0.00	0.00	0.00	0.00
M73	0.00	0.00	0.00	0.00	0.00	0.00
M74_M75	0.00	0.00	0.00	0.00	0.00	0.00

NH_3 in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
N	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**
N77	0.00	0.00	0.00	0.00	0.00	0.00
N78	0.00	0.00	0.00	0.00	0.00	0.00
N79	0.00	0.00	0.00	0.00	0.00	0.00
N80-N82	0.00	0.00	0.00	0.00	0.00	0.00
O	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
P	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Q	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Q86	0.00	0.00	0.00	0.00	0.00	0.00
Q87_Q88	0.00	0.00	0.00	0.00	0.00	0.00
R	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
R90-R90	0.00	0.00	0.00	0.00	0.00	0.00
R93	0.00	0.00	0.00	0.00	0.00	0.00
S	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
S94	0.00	0.00	0.00	0.00	0.00	0.00
S95	0.00	0.00	0.00	0.00	0.00	0.00
S96	0.00	0.00	0.00	0.00	0.00	0.00
T	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
U	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
HH total	**0.39**	**0.33**	**0.29**	**0.34**	**0.28**	**0.30**
HH Transport	0.39	0.33	0.29	0.34	0.28	0.30
HH Heating/cooling	0.00	0.00	0.00	0.00	0.00	0.00
HH Other	0.00	0.00	0.00	0.00	0.00	0.00

Emissions of CO in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A-U 1-99	**4.73**	**3.13**	**4.33**	**3.53**	**4.15**	**3.25**
A	**0.10**	**0.07**	**0.10**	**0.06**	**0.09**	**0.07**
A01	0.07	0.05	0.07	0.04	0.06	0.05
A02	0.03	0.02	0.03	0.02	0.04	0.02
A03	0.00	0.00	0.00	0.00	0.00	0.00
B	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
C	**0.21**	**0.19**	**0.25**	**0.19**	**0.26**	**0.19**
C10-C12	0.04	0.03	0.05	0.03	0.04	0.03
C13-C15	0.01	0.01	0.01	0.01	0.01	0.01
C16-C18	0.04	0.03	0.04	0.04	0.05	0.04
C16	0.03	0.03	0.03	0.04	0.04	0.03
C17	0.00	0.00	0.00	0.00	0.00	0.00
C18	0.01	0.00	0.01	0.00	0.01	0.01
C19	0.00	0.00	0.00	0.00	0.00	0.00
C20	0.00	0.00	0.00	0.00	0.00	0.00
C21	0.00	0.00	0.00	0.00	0.00	0.00
C22_C23	0.02	0.02	0.03	0.02	0.03	0.02
C22	0.01	0.01	0.01	0.01	0.01	0.01
C23	0.01	0.01	0.01	0.01	0.02	0.01
C24_C25	0.05	0.05	0.06	0.04	0.07	0.05
C24	0.01	0.00	0.01	0.00	0.00	0.00
C25	0.04	0.04	0.06	0.04	0.06	0.05
C26	0.00	0.00	0.00	0.00	0.00	0.00
C27	0.01	0.01	0.01	0.01	0.01	0.01
C28	0.01	0.01	0.01	0.01	0.01	0.01
C29_C30	0.00	0.00	0.00	0.00	0.00	0.00
C29	0.00	0.00	0.00	0.00	0.00	0.00
C30	0.00	0.00	0.00	0.00	0.00	0.00
C31-C33	0.02	0.02	0.03	0.02	0.04	0.02
C31_C32	0.01	0.01	0.02	0.01	0.02	0.01
C33	0.01	0.01	0.02	0.01	0.02	0.01

Emissions of CO in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
D	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
E	**0.02**	**0.01**	**0.02**	**0.01**	**0.02**	**0.01**
E36	0.01	0.00	0.01	0.00	0.01	0.00
E37-E39	0.01	0.01	0.01	0.01	0.01	0.01
F	**0.22**	**0.19**	**0.24**	**0.18**	**0.26**	**0.18**
G	**0.55**	**0.42**	**0.53**	**0.44**	**0.62**	**0.46**
G45	0.07	0.06	0.07	0.05	0.09	0.08
G46	0.26	0.19	0.22	0.20	0.27	0.19
G47	0.21	0.18	0.24	0.18	0.25	0.18
H	**3.03**	**1.66**	**2.45**	**2.06**	**1.92**	**1.66**
H49	2.79	1.54	2.28	1.92	1.75	1.54
H50	0.00	0.00	0.00	0.00	0.00	0.00
H51	0.00	0.00	0.00	0.00	0.00	0.00
H52	0.23	0.12	0.16	0.13	0.16	0.11
H53	0.01	0.01	0.01	0.01	0.01	0.01
I	**0.05**	**0.06**	**0.06**	**0.05**	**0.07**	**0.05**
J	**0.04**	**0.04**	**0.06**	**0.04**	**0.07**	**0.05**
J58-J60	0.01	0.01	0.01	0.01	0.02	0.01
J58	0.01	0.01	0.01	0.01	0.01	0.01
J59_J60	0.00	0.00	0.01	0.00	0.01	0.00
J61	0.00	0.00	0.00	0.00	0.00	0.00
J62_J63	0.03	0.03	0.04	0.03	0.05	0.04
K	**0.01**	**0.01**	**0.02**	**0.02**	**0.04**	**0.03**
K64	0.00	0.00	0.01	0.01	0.03	0.02
K65	0.00	0.00	0.00	0.00	0.00	0.00
K66	0.01	0.01	0.01	0.01	0.01	0.01
L	**0.05**	**0.05**	**0.06**	**0.05**	**0.07**	**0.05**
L68A	0.05	0.05	0.06	0.05	0.07	0.05
M	**0.18**	**0.17**	**0.21**	**0.17**	**0.27**	**0.19**
M69-M71	0.12	0.12	0.15	0.12	0.21	0.14
M69_M70	0.09	0.09	0.10	0.09	0.15	0.10
M71	0.04	0.04	0.05	0.04	0.06	0.04
M72	0.00	0.00	0.00	0.00	0.00	0.00
M73-M75	0.05	0.04	0.06	0.04	0.06	0.04
M73	0.03	0.02	0.03	0.02	0.03	0.02
M74_M75	0.02	0.02	0.03	0.02	0.03	0.02
N	**0.13**	**0.11**	**0.16**	**0.12**	**0.23**	**0.17**
N77	0.05	0.03	0.05	0.05	0.09	0.08
N78	0.00	0.00	0.01	0.00	0.01	0.00
N79	0.01	0.01	0.01	0.01	0.01	0.01
N80-N82	0.07	0.07	0.09	0.06	0.12	0.08
O	**0.02**	**0.02**	**0.03**	**0.02**	**0.03**	**0.02**
P	**0.02**	**0.02**	**0.03**	**0.02**	**0.04**	**0.03**
Q	**0.04**	**0.04**	**0.06**	**0.04**	**0.08**	**0.05**
Q86	0.03	0.04	0.05	0.04	0.07	0.04
Q87_Q88	0.01	0.01	0.01	0.00	0.01	0.00
R	**0.02**	**0.02**	**0.02**	**0.02**	**0.03**	**0.02**
R90-R90	0.01	0.01	0.01	0.01	0.01	0.01
R93	0.01	0.01	0.01	0.01	0.02	0.01
S	**0.03**	**0.03**	**0.04**	**0.03**	**0.04**	**0.03**
S94	0.01	0.01	0.02	0.01	0.02	0.01
S95	0.01	0.01	0.01	0.01	0.01	0.01
S96	0.01	0.01	0.01	0.01	0.02	0.01
T	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
U	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
HH total	**30.85**	**25.90**	**23.89**	**15.53**	**22.69**	**13.22**
HH Transport	30.85	25.90	23.89	15.53	22.69	13.22

Emissions of CO in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
HH Heating/cooling	0.00	0.00	0.00	0.00	0.00	0.00
HH Other	0.00	0.00	0.00	0.00	0.00	0.00

Emissions of $PM_{2.5}$ in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A-U 1-99	**0.39**	**0.28**	**0.42**	**0.41**	**0.41**	**0.41**
A	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**
A01	0.00	0.00	0.01	0.00	0.00	0.01
A02	0.00	0.00	0.00	0.00	0.00	0.00
A03	0.00	0.00	0.00	0.00	0.00	0.00
B	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
C	**0.01**	**0.01**	**0.02**	**0.02**	**0.02**	**0.02**
C10-C12	0.00	0.00	0.01	0.00	0.00	0.00
C13-C15	0.00	0.00	0.00	0.00	0.00	0.00
C16-C18	0.00	0.00	0.00	0.00	0.00	0.00
C16	0.00	0.00	0.00	0.00	0.00	0.00
C17	0.00	0.00	0.00	0.00	0.00	0.00
C18	0.00	0.00	0.00	0.00	0.00	0.00
C19	0.00	0.00	0.00	0.00	0.00	0.00
C20	0.00	0.00	0.00	0.00	0.00	0.00
C21	0.00	0.00	0.00	0.00	0.00	0.00
C22_C23	0.00	0.00	0.00	0.00	0.00	0.00
C22	0.00	0.00	0.00	0.00	0.00	0.00
C23	0.00	0.00	0.00	0.00	0.00	0.00
C24_C25	0.00	0.00	0.00	0.00	0.00	0.01
C24	0.00	0.00	0.00	0.00	0.00	0.00
C25	0.00	0.00	0.00	0.00	0.00	0.00
C26	0.00	0.00	0.00	0.00	0.00	0.00
C27	0.00	0.00	0.00	0.00	0.00	0.00
C28	0.00	0.00	0.00	0.00	0.00	0.00
C29_C30	0.00	0.00	0.00	0.00	0.00	0.00
C29	0.00	0.00	0.00	0.00	0.00	0.00
C30	0.00	0.00	0.00	0.00	0.00	0.00
C31-C33	0.00	0.00	0.00	0.00	0.00	0.00
C31_C32	0.00	0.00	0.00	0.00	0.00	0.00
C33	0.00	0.00	0.00	0.00	0.00	0.00
D	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
E	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
E36	0.00	0.00	0.00	0.00	0.00	0.00
E37-E39	0.00	0.00	0.00	0.00	0.00	0.00
F	**0.01**	**0.01**	**0.02**	**0.02**	**0.02**	**0.02**
G	**0.04**	**0.03**	**0.04**	**0.05**	**0.05**	**0.05**
G45	0.01	0.00	0.01	0.00	0.01	0.01
G46	0.02	0.02	0.02	0.02	0.02	0.02
G47	0.01	0.01	0.02	0.02	0.02	0.02
H	**0.28**	**0.18**	**0.28**	**0.27**	**0.25**	**0.25**
H49	0.26	0.17	0.26	0.25	0.23	0.23
H50	0.00	0.00	0.00	0.00	0.00	0.00
H51	0.00	0.00	0.00	0.00	0.00	0.00
H52	0.02	0.01	0.02	0.02	0.02	0.02
H53	0.00	0.00	0.00	0.00	0.00	0.00
I	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
J	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
J58-J60	0.00	0.00	0.00	0.00	0.00	0.00
J58	0.00	0.00	0.00	0.00	0.00	0.00
J59_J60	0.00	0.00	0.00	0.00	0.00	0.00
J61	0.00	0.00	0.00	0.00	0.00	0.00

Emissions of $PM_{2.5}$ in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
J62_J63	0.00	0.00	0.00	0.00	0.00	0.00
K	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
K64	0.00	0.00	0.00	0.00	0.00	0.00
K65	0.00	0.00	0.00	0.00	0.00	0.00
K66	0.00	0.00	0.00	0.00	0.00	0.00
L	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**
L68A	0.00	0.00	0.00	0.00	0.01	0.01
M	**0.01**	**0.01**	**0.01**	**0.01**	**0.02**	**0.02**
M69-M71	0.01	0.01	0.01	0.01	0.01	0.01
M69_M70	0.01	0.01	0.01	0.01	0.01	0.01
M71	0.00	0.00	0.00	0.00	0.00	0.00
M72	0.00	0.00	0.00	0.00	0.00	0.00
M73-M75	0.00	0.00	0.00	0.00	0.00	0.00
M73	0.00	0.00	0.00	0.00	0.00	0.00
M74_M75	0.00	0.00	0.00	0.00	0.00	0.00
N	**0.01**	**0.01**	**0.01**	**0.01**	**0.02**	**0.02**
N77	0.00	0.00	0.00	0.01	0.01	0.01
N78	0.00	0.00	0.00	0.00	0.00	0.00
N79	0.00	0.00	0.00	0.00	0.00	0.00
N80-N82	0.00	0.00	0.01	0.01	0.01	0.01
O	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
P	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Q	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Q86	0.00	0.00	0.00	0.00	0.00	0.00
Q87_Q88	0.00	0.00	0.00	0.00	0.00	0.00
R	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
R90-R90	0.00	0.00	0.00	0.00	0.00	0.00
R93	0.00	0.00	0.00	0.00	0.00	0.00
S	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
S94	0.00	0.00	0.00	0.00	0.00	0.00
S95	0.00	0.00	0.00	0.00	0.00	0.00
S96	0.00	0.00	0.00	0.00	0.00	0.00
T	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
U	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
HH total	**0.87**	**0.85**	**0.85**	**0.74**	**0.77**	**0.69**
HH Transport	0.87	0.85	0.85	0.74	0.77	0.69
HH Heating/cooling	0.00	0.00	0.00	0.00	0.00	0.00
HH Other	0.00	0.00	0.00	0.00	0.00	0.00

Emissions of PM_{10} in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
A-U 1-99	**0.55**	**0.41**	**0.61**	**0.63**	**0.63**	**0.65**
A	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**
A01	0.01	0.00	0.01	0.01	0.01	0.01
A02	0.00	0.00	0.00	0.00	0.00	0.00
A03	0.00	0.00	0.00	0.00	0.00	0.00
B	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
C	**0.02**	**0.02**	**0.03**	**0.03**	**0.03**	**0.03**
C10-C12	0.00	0.00	0.01	0.01	0.01	0.01
C13-C15	0.00	0.00	0.00	0.00	0.00	0.00
C16-C18	0.00	0.00	0.00	0.01	0.01	0.01
C16	0.00	0.00	0.00	0.01	0.00	0.01
C17	0.00	0.00	0.00	0.00	0.00	0.00
C18	0.00	0.00	0.00	0.00	0.00	0.00
C19	0.00	0.00	0.00	0.00	0.00	0.00
C20	0.00	0.00	0.00	0.00	0.00	0.00
C21	0.00	0.00	0.00	0.00	0.00	0.00

Emissions of PM_{10} in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
C22_C23	0.00	0.00	0.00	0.00	0.00	0.00
C22	0.00	0.00	0.00	0.00	0.00	0.00
C23	0.00	0.00	0.00	0.00	0.00	0.00
C24_C25	0.00	0.00	0.01	0.01	0.01	0.01
C24	0.00	0.00	0.00	0.00	0.00	0.00
C25	0.00	0.00	0.01	0.01	0.01	0.01
C26	0.00	0.00	0.00	0.00	0.00	0.00
C27	0.00	0.00	0.00	0.00	0.00	0.00
C28	0.00	0.00	0.00	0.00	0.00	0.00
C29_C30	0.00	0.00	0.00	0.00	0.00	0.00
C29	0.00	0.00	0.00	0.00	0.00	0.00
C30	0.00	0.00	0.00	0.00	0.00	0.00
C31-C33	0.00	0.00	0.00	0.00	0.00	0.00
C31_C32	0.00	0.00	0.00	0.00	0.00	0.00
C33	0.00	0.00	0.00	0.00	0.00	0.00
D	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
E	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
E36	0.00	0.00	0.00	0.00	0.00	0.00
E37-E39	0.00	0.00	0.00	0.00	0.00	0.00
F	**0.02**	**0.02**	**0.03**	**0.03**	**0.03**	**0.03**
G	**0.05**	**0.05**	**0.06**	**0.07**	**0.08**	**0.08**
G45	0.01	0.01	0.01	0.01	0.01	0.01
G46	0.03	0.02	0.03	0.04	0.04	0.04
G47	0.02	0.02	0.03	0.03	0.03	0.03
H	**0.40**	**0.26**	**0.41**	**0.41**	**0.39**	**0.39**
H49	0.37	0.25	0.38	0.38	0.36	0.37
H50	0.00	0.00	0.00	0.00	0.00	0.00
H51	0.00	0.00	0.00	0.00	0.00	0.00
H52	0.03	0.02	0.03	0.03	0.03	0.03
H53	0.00	0.00	0.00	0.00	0.00	0.00
I	**0.00**	**0.01**	**0.00**	**0.01**	**0.01**	**0.01**
J	**0.00**	**0.00**	**0.01**	**0.01**	**0.01**	**0.01**
J58-J60	0.00	0.00	0.00	0.00	0.00	0.00
J58	0.00	0.00	0.00	0.00	0.00	0.00
J59_J60	0.00	0.00	0.00	0.00	0.00	0.00
J61	0.00	0.00	0.00	0.00	0.00	0.00
J62_J63	0.00	0.00	0.00	0.00	0.00	0.01
K	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
K64	0.00	0.00	0.00	0.00	0.00	0.00
K65	0.00	0.00	0.00	0.00	0.00	0.00
K66	0.00	0.00	0.00	0.00	0.00	0.00
L	**0.00**	**0.00**	**0.01**	**0.01**	**0.01**	**0.01**
L68A	0.00	0.00	0.01	0.01	0.01	0.01
M	**0.01**	**0.01**	**0.02**	**0.02**	**0.02**	**0.03**
M69-M71	0.01	0.01	0.01	0.02	0.02	0.02
M69_M70	0.01	0.01	0.01	0.01	0.01	0.01
M71	0.00	0.00	0.00	0.00	0.00	0.00
M72	0.00	0.00	0.00	0.00	0.00	0.00
M73-M75	0.00	0.00	0.01	0.01	0.01	0.01
M73	0.00	0.00	0.00	0.00	0.00	0.00
M74_M75	0.00	0.00	0.00	0.00	0.00	0.00
N	**0.01**	**0.01**	**0.02**	**0.02**	**0.03**	**0.03**
N77	0.01	0.00	0.01	0.01	0.01	0.01
N78	0.00	0.00	0.00	0.00	0.00	0.00
N79	0.00	0.00	0.00	0.00	0.00	0.00
N80-N82	0.01	0.01	0.01	0.01	0.02	0.01
O	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Emissions of PM_{10} in tonnes						
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
P	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Q	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**
Q86	0.00	0.00	0.00	0.00	0.00	0.00
Q87_Q88	0.00	0.00	0.00	0.00	0.00	0.00
R	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
R90-R90	0.00	0.00	0.00	0.00	0.00	0.00
R93	0.00	0.00	0.00	0.00	0.00	0.00
S	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
S94	0.00	0.00	0.00	0.00	0.00	0.00
S95	0.00	0.00	0.00	0.00	0.00	0.00
S96	0.00	0.00	0.00	0.00	0.00	0.00
T	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
U	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
HH total	**1.09**	**1.12**	**1.08**	**0.99**	**1.00**	**0.93**
HH Transport	1.09	1.12	1.08	0.99	1.00	0.93
HH Heating/cooling	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
HH Other	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

ANNEX III: PEFA MODULE FOR FUELS OF ROAD TRANSPORT

The following table represents the data reported on 27th September 2022 as the Deliverable D1.3 PEFA module.

Tab. AIII.1: *New allocation of energy used from road transport in different NACE rev.2 categories*[3]

Fossil Petrol in TJ								
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
A-U 1-99	**1 651.62**	**1 701.67**	**2 011.97**	**2 348.53**	**2 623.07**	**2 814.96**	**3 647.18**	**3 588.08**
A	**52.34**	**53.31**	**64.13**	**70.46**	**75.22**	**74.81**	**95.86**	**87.25**
A01	33.81	34.39	40.87	44.67	47.39	48.34	64.38	60.45
A02	18.33	18.71	23.04	25.55	27.53	26.12	31.04	26.37
A03	0.19	0.21	0.21	0.24	0.30	0.35	0.44	0.42
B	**2.08**	**1.52**	**1.92**	**1.95**	**1.93**	**1.82**	**2.30**	**2.17**
C	**149.52**	**166.60**	**199.43**	**233.64**	**258.96**	**283.17**	**345.81**	**343.50**
C10-C12	16.06	16.71	21.34	22.86	24.95	26.64	33.22	33.44
C13-C15	8.96	10.28	12.09	14.04	15.17	16.51	19.55	19.50
C16	17.55	18.63	22.15	27.52	29.10	31.94	37.82	37.94
C17	1.24	1.42	1.58	2.00	2.23	2.30	2.72	2.93
C18	5.46	5.89	7.03	8.32	9.07	9.76	11.23	11.10
C19	0.02	0.00	0.01	0.01	0.00	0.03	0.11	0.12
C20	2.96	3.28	3.78	4.26	4.35	4.23	4.78	4.89
C21	0.31	0.45	0.49	0.57	0.54	0.66	0.79	0.69
C22	5.94	7.34	8.98	10.78	12.54	15.65	17.68	17.25
C23	6.48	7.51	8.72	10.02	11.65	14.00	18.60	20.62
C24	2.75	2.78	3.34	3.57	3.97	3.91	4.90	5.01
C25	39.38	44.13	53.34	62.60	70.62	77.30	91.02	89.75
C26	3.14	3.45	3.96	4.95	5.81	6.34	7.76	8.83
C27	5.48	6.20	7.44	8.77	9.92	10.86	12.95	13.12
C28	6.71	8.12	8.75	11.25	11.99	12.98	15.97	16.07
C29	1.91	2.19	2.45	2.99	3.76	5.12	13.68	9.34
C30	0.67	0.95	0.73	0.89	0.93	0.81	0.89	1.05
C31_C32	11.24	12.71	15.76	18.13	19.82	20.71	24.07	23.88
C33	13.26	14.55	17.48	20.15	22.55	23.41	28.09	27.96
D	**3.51**	**4.05**	**4.66**	**5.58**	**6.34**	**6.69**	**7.98**	**7.52**
E	**10.32**	**11.78**	**13.87**	**15.93**	**16.87**	**17.61**	**21.28**	**20.49**
E36	4.70	5.60	6.68	7.18	7.38	7.02	7.63	6.83
E37-E39	5.63	6.19	7.19	8.75	9.50	10.59	13.65	13.66
F	**148.06**	**158.81**	**190.37**	**219.20**	**243.77**	**263.44**	**311.58**	**308.46**
G	**322.42**	**352.28**	**420.07**	**497.61**	**557.13**	**605.24**	**817.30**	**814.63**
G45	43.65	47.97	58.00	68.92	82.53	103.31	229.38	215.28
G46	139.01	150.20	175.60	211.37	233.69	246.02	287.02	309.09
G47	139.76	154.10	186.47	217.33	240.91	255.91	300.91	290.25
H	**398.13**	**285.59**	**318.81**	**320.78**	**309.83**	**294.12**	**314.65**	**275.36**
H49	351.51	247.64	276.10	275.07	258.97	243.49	256.58	222.82
H50	0.20	0.23	0.35	0.28	0.29	0.34	0.48	0.56
H51	0.07	0.17	0.17	0.18	0.24	0.32	0.58	0.55
H52	42.99	34.46	37.68	40.45	44.89	40.48	45.51	39.97
H53	3.36	3.09	4.51	4.80	5.44	9.48	11.49	11.47
I	**41.27**	**47.71**	**55.33**	**66.16**	**73.58**	**81.31**	**94.18**	**91.18**
J	**52.81**	**64.07**	**77.13**	**95.06**	**107.11**	**115.82**	**134.89**	**139.55**
J58	6.73	7.57	9.13	10.89	11.99	12.18	13.86	13.16

[3] Zero values = no fuel is allocated in this category

Fossil Petrol in TJ								
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
J59_J60	5.63	6.26	7.46	9.21	10.06	10.47	11.92	12.19
J61	3.32	4.57	5.39	6.50	6.97	7.34	8.12	9.43
J62_J63	37.13	45.68	55.15	68.47	78.10	85.84	100.98	104.77
K	**13.83**	**17.66**	**20.78**	**31.87**	**49.75**	**57.39**	**107.80**	**97.56**
K64	4.23	6.38	7.43	16.39	32.89	40.70	85.42	76.58
K65	0.59	0.91	1.03	1.28	1.66	1.47	4.39	3.55
K66	9.02	10.38	12.32	14.20	15.19	15.22	18.00	17.43
L	**41.17**	**48.34**	**56.97**	**70.55**	**81.43**	**86.92**	**112.23**	**125.11**
L68A	41.17	48.34	56.97	70.55	81.43	86.92	112.23	125.11
M	**179.49**	**214.13**	**256.60**	**315.48**	**361.64**	**386.63**	**457.43**	**459.46**
M69_M70	87.10	107.34	126.89	160.63	189.63	204.53	242.69	244.32
M71	45.55	53.67	64.83	77.67	86.35	90.34	107.25	105.05
M72	2.48	3.20	3.89	4.42	4.75	4.90	6.77	7.11
M73	23.82	27.22	33.67	40.35	45.34	49.21	56.53	58.08
M74_M75	20.53	22.71	27.32	32.41	35.57	37.65	44.20	44.89
N	**86.68**	**103.85**	**124.88**	**159.99**	**215.21**	**267.25**	**430.60**	**441.58**
N77	20.32	25.30	30.54	49.39	84.78	126.27	258.00	263.66
N78	3.29	3.83	4.39	5.23	5.81	5.93	7.44	7.27
N79	3.37	3.92	4.78	5.16	6.25	6.69	7.76	6.98
N80-N82	59.70	70.80	85.17	100.21	118.37	128.35	157.40	163.66
O	**27.47**	**29.85**	**35.68**	**41.09**	**40.24**	**38.43**	**99.94**	**85.88**
P	**22.41**	**25.11**	**30.40**	**34.69**	**37.34**	**40.61**	**53.74**	**50.57**
Q	**55.27**	**68.67**	**82.92**	**101.29**	**114.20**	**117.31**	**143.79**	**144.33**
Q86	49.55	62.38	75.40	92.92	105.52	108.35	127.98	129.20
Q87_Q88	5.72	6.29	7.52	8.37	8.68	8.96	15.80	15.13
R	**15.40**	**16.79**	**20.07**	**23.31**	**25.00**	**26.00**	**32.37**	**30.79**
R90-R90	6.55	7.38	8.64	10.24	11.01	11.77	15.48	14.59
R93	8.84	9.42	11.43	13.07	13.99	14.23	16.89	16.20
S	**28.84**	**30.91**	**37.24**	**43.13**	**46.79**	**49.67**	**62.61**	**61.97**
S94	13.29	13.43	16.30	17.66	18.23	18.11	24.83	23.13
S95	5.29	6.11	7.27	8.55	9.11	9.79	11.26	11.26
S96	10.27	11.37	13.67	16.91	19.45	21.76	26.51	27.58
T	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
U	**0.61**	**0.65**	**0.74**	**0.75**	**0.73**	**0.72**	**0.85**	**0.73**
HH total	**20 934.02**	**18 682.23**	**19 037.85**	**19 753.72**	**19 327.79**	**18 642.16**	**19 203.58**	**17 541.49**
HH Transport	20 934.02	18 682.23	19 037.85	19 753.72	19 327.79	18 642.16	19 203.58	17 541.49
HH Heating/cooling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HH Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Fossil Diesel in TJ								
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
A-U 1-99	**28 915.44**	**21 310.92**	**32 775.49**	**35 718.17**	**37 116.57**	**39 283.40**	**42 050.87**	**29 536.97**
A	**448.57**	**355.26**	**601.14**	**504.76**	**607.98**	**656.70**	**884.55**	**669.83**
A01	312.62	246.96	397.13	322.07	361.92	483.68	574.46	478.20
A02	135.27	107.49	202.95	181.54	244.49	171.43	308.64	190.08
A03	0.68	0.81	1.06	1.15	1.58	1.59	1.45	1.55
B	**48.15**	**11.88**	**32.68**	**27.47**	**19.70**	**15.53**	**31.65**	**19.92**
C	**1 001.55**	**1 025.06**	**1 572.74**	**1 667.85**	**1 743.72**	**1 902.18**	**2 276.23**	**1 956.15**
C10-C12	255.03	187.09	405.78	301.14	349.29	347.88	539.23	257.36
C13-C15	27.32	35.86	46.22	56.65	52.19	53.16	59.82	68.85
C16	159.92	139.37	187.16	369.13	262.26	323.44	407.41	340.26
C17	6.39	7.66	11.36	10.00	13.61	14.37	13.77	14.96
C18	14.93	17.82	27.12	23.90	25.42	57.05	29.52	43.33
C19	1.00	0.27	0.90	0.80	0.51	0.49	0.53	1.33
C20	10.35	17.74	18.27	16.49	22.02	31.96	18.31	21.13
C21	1.69	1.84	2.44	2.39	2.49	2.69	3.27	3.85
C22	56.85	44.84	85.38	59.85	64.08	67.82	77.54	82.72

Fossil Diesel in TJ								
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
C23	74.54	72.12	101.01	104.23	172.74	139.60	221.53	164.78
C24	38.12	20.96	37.54	26.29	37.71	24.50	29.41	32.49
C25	175.07	217.60	328.01	307.06	333.73	428.12	400.40	416.40
C26	9.75	15.35	17.94	17.49	21.05	27.39	24.97	27.88
C27	28.10	28.98	39.97	49.77	75.84	66.83	76.65	112.69
C28	39.98	82.39	56.94	146.77	86.74	112.19	128.57	114.27
C29	18.96	19.31	21.41	21.29	37.47	29.63	51.77	49.60
C30	5.31	17.26	4.62	5.33	9.38	6.33	6.37	6.18
C31_C32	34.71	37.44	91.25	57.71	67.35	66.32	72.59	72.43
C33	43.51	61.17	89.41	91.57	109.85	102.42	114.55	125.65
D	**9.81**	**15.03**	**18.90**	**18.98**	**26.42**	**25.32**	**30.56**	**26.49**
E	**77.31**	**63.57**	**95.49**	**125.69**	**114.53**	**143.78**	**155.76**	**123.16**
E36	26.56	17.20	28.70	28.41	34.69	34.52	42.41	35.60
E37-E39	50.75	46.36	66.79	97.28	79.85	109.26	113.35	87.56
F	**915.02**	**960.60**	**1 372.15**	**1 492.60**	**1 602.70**	**1 709.40**	**1 988.32**	**1 737.67**
G	**2 759.37**	**2 357.42**	**3 253.31**	**3 874.70**	**4 308.52**	**4 790.23**	**5 028.21**	**3 725.66**
G45	378.07	293.44	429.49	409.81	622.07	816.13	863.91	654.75
G46	1 395.46	1 140.39	1 401.61	1 948.38	2 074.35	2 149.81	2 158.19	1 626.71
G47	985.84	923.58	1 422.21	1 516.51	1 612.10	1 824.30	2 006.10	1 444.19
H	**21 337.69**	**13 927.60**	**22 208.77**	**23 893.29**	**23 615.26**	**24 733.39**	**25 075.80**	**15 279.23**
H49	19 662.15	12 919.67	20 696.40	22 286.22	21 624.58	23 029.14	23 416.76	14 335.27
H50	0.58	0.85	9.75	1.11	1.22	7.59	1.39	4.99
H51	0.80	0.99	1.23	1.73	2.04	2.00	2.77	2.29
H52	1611.44	976.70	1381.98	1528.79	1848.80	1593.67	1518.57	827.69
H53	62.72	29.39	119.41	75.44	138.62	101.00	136.31	108.99
I	**196.11**	**261.80**	**256.52**	**308.07**	**326.53**	**398.29**	**427.47**	**349.22**
J	**124.79**	**181.15**	**268.06**	**287.91**	**310.30**	**409.96**	**379.58**	**367.25**
J58	12.88	17.12	23.71	25.65	26.01	27.94	34.36	31.53
J59_J60	15.82	21.33	28.43	29.06	32.76	34.54	37.89	37.95
J61	9.31	17.46	24.00	26.39	28.88	29.75	32.70	31.26
J62_J63	86.78	125.23	191.92	206.81	222.65	317.73	274.63	266.51
K	**36.13**	**56.63**	**76.00**	**120.03**	**188.22**	**215.99**	**311.38**	**278.12**
K64	20.21	32.55	42.95	84.22	149.58	177.44	259.89	226.31
K65	1.23	3.57	4.90	5.79	6.47	5.19	15.18	14.19
K66	14.70	20.50	28.15	30.03	32.16	33.36	36.31	37.62
L	**251.79**	**266.59**	**335.18**	**426.08**	**504.82**	**527.43**	**541.86**	**504.21**
L68A	251.79	266.59	335.18	426.08	504.82	527.43	541.86	504.21
M	**714.51**	**752.73**	**1 002.29**	**1 153.82**	**1 286.69**	**1 403.66**	**1 529.69**	**1 532.31**
M69_M70	378.46	434.05	478.34	627.75	760.37	796.26	892.25	814.84
M71	99.68	142.36	197.56	213.78	243.53	251.00	284.11	275.45
M72	4.92	7.39	10.01	10.00	10.43	11.26	13.98	15.92
M73	125.40	82.04	180.10	148.47	153.50	173.80	187.72	225.44
M74_M75	106.06	86.89	136.28	153.83	118.85	171.35	151.63	200.66
N	**624.28**	**641.42**	**1 044.05**	**1 142.91**	**1 766.86**	**1 568.93**	**2 460.53**	**2 003.97**
N77	293.88	239.66	402.26	576.78	743.67	758.34	1 254.48	1 062.84
N78	19.36	19.02	29.21	29.91	32.49	37.46	65.72	52.30
N79	44.96	47.58	97.33	76.26	120.77	101.68	122.60	71.05
N80-N82	266.08	335.17	515.26	459.96	869.94	671.45	1 017.74	817.78
O	**22.19**	**27.64**	**38.41**	**35.08**	**35.99**	**33.03**	**145.28**	**144.39**
P	**57.60**	**76.03**	**114.09**	**119.64**	**119.40**	**164.07**	**179.84**	**167.33**
Q	**120.58**	**163.39**	**226.37**	**235.12**	**254.81**	**263.44**	**303.93**	**314.78**
Q86	112.18	152.76	210.93	219.45	238.21	246.07	274.27	282.29
Q87_Q88	8.40	10.64	15.44	15.67	16.60	17.37	29.66	32.49
R	**61.31**	**76.05**	**114.99**	**128.09**	**139.02**	**127.26**	**137.24**	**148.17**
R90-R90	16.19	23.44	30.23	32.27	33.84	39.84	50.34	48.04
R93	45.12	52.62	84.76	95.82	105.18	87.41	86.90	100.12
S	**106.79**	**88.91**	**140.91**	**152.53**	**142.03**	**191.11**	**159.75**	**185.88**

Fossil Diesel in TJ								
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
S94	25.74	30.22	46.77	44.04	44.38	49.30	58.37	60.08
S95	13.75	17.77	24.28	43.95	28.25	46.93	32.55	36.69
S96	67.31	40.92	69.86	64.54	69.40	94.88	68.82	89.12
T	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**
U	**1.89**	**2.14**	**3.46**	**3.54**	**3.07**	**3.69**	**3.26**	**3.23**
HH total	**31 288.90**	**41 615.44**	**38 519.20**	**36 348.33**	**36 376.47**	**36 927.13**	**35 824.83**	**39 632.29**
HH Transport	31 288.90	41 615.44	38 519.20	36 348.33	36 376.47	36 927.13	35 824.83	39 632.29
HH Heating/cooling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HH Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

LPG in TJ								
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
A-U 1-99	**79.02**	**98.10**	**131.63**	**154.71**	**183.16**	**188.25**	**188.78**	**158.15**
A	**3.22**	**3.71**	**4.49**	**5.13**	**6.09**	**6.25**	**6.54**	**5.31**
A01	1.67	1.95	2.38	2.55	2.95	3.28	3.49	3.10
A02	1.55	1.76	2.12	2.57	3.14	2.97	3.05	2.21
A03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B	**0.05**	**0.04**	**0.03**	**0.04**	**0.04**	**0.04**	**0.03**	**0.02**
C	**8.40**	**10.97**	**13.94**	**16.36**	**19.58**	**20.57**	**20.38**	**16.56**
C10-C12	0.68	1.21	1.54	1.89	2.20	2.18	2.25	1.76
C13-C15	0.84	0.92	0.95	1.27	1.57	1.66	1.59	1.24
C16	1.35	1.56	2.06	2.43	2.98	3.07	2.97	2.52
C17	0.00	0.03	0.03	0.04	0.08	0.08	0.08	0.04
C18	0.39	0.38	0.41	0.45	0.52	0.68	0.59	0.42
C19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C21	0.09	0.07	0.07	0.08	0.08	0.08	0.08	0.06
C22	0.16	0.45	0.56	0.85	0.84	0.86	0.96	0.74
C23	0.34	0.41	0.58	0.68	0.81	0.84	0.82	0.62
C24	0.17	0.17	0.13	0.18	0.20	0.23	0.22	0.13
C25	2.14	2.85	4.36	4.93	5.87	6.50	6.33	5.22
C26	0.21	0.20	0.20	0.23	0.33	0.32	0.30	0.32
C27	0.20	0.26	0.34	0.38	0.49	0.44	0.49	0.30
C28	0.26	0.50	0.43	0.48	0.60	0.66	0.66	0.52
C29	0.08	0.07	0.07	0.08	0.08	0.31	0.25	0.28
C30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C31_C32	0.68	1.02	1.12	1.25	1.40	1.16	1.30	1.04
C33	0.82	0.87	1.08	1.16	1.53	1.50	1.48	1.34
D	**0.04**	**0.07**	**0.07**	**0.11**	**0.16**	**0.20**	**0.18**	**0.26**
E	**0.33**	**0.32**	**0.36**	**0.41**	**0.48**	**0.50**	**0.47**	**0.38**
E36	0.07	0.06	0.06	0.07	0.08	0.08	0.08	0.04
E37-E39	0.26	0.26	0.30	0.33	0.40	0.43	0.40	0.34
F	**9.62**	**11.45**	**15.75**	**18.14**	**21.60**	**21.97**	**21.34**	**18.46**
G	**20.91**	**25.38**	**34.66**	**39.55**	**46.91**	**49.25**	**46.61**	**38.96**
G45	2.80	3.81	5.30	5.94	7.54	8.45	7.74	6.44
G46	8.05	9.46	12.91	14.63	16.99	18.48	16.71	14.63
G47	10.06	12.11	16.46	18.98	22.38	22.32	22.16	17.89
H	**5.98**	**7.70**	**11.39**	**13.41**	**15.60**	**14.17**	**16.52**	**12.30**
H49	4.96	6.26	9.42	10.71	12.49	11.90	13.18	10.30
H50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H52	0.71	1.05	1.51	2.14	2.51	1.52	2.63	1.35
H53	0.32	0.38	0.46	0.56	0.60	0.75	0.71	0.66
I	**3.38**	**4.96**	**6.86**	**8.30**	**9.43**	**10.21**	**9.66**	**9.00**
J	**2.61**	**2.93**	**3.90**	**4.73**	**5.79**	**6.12**	**5.78**	**4.84**
J58	0.28	0.33	0.47	0.59	0.68	0.78	0.73	0.51
J59_J60	0.38	0.40	0.50	0.59	0.68	0.65	0.61	0.48

LPG in TJ								
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
J61	0.04	0.04	0.07	0.08	0.12	0.12	0.11	0.13
J62_J63	1.90	2.17	2.86	3.47	4.32	4.57	4.34	3.71
K	**0.50**	**0.60**	**0.58**	**0.68**	**1.05**	**1.52**	**1.45**	**1.20**
K64	0.04	0.13	0.14	0.19	0.52	1.05	1.01	0.82
K65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K66	0.45	0.47	0.44	0.49	0.53	0.48	0.44	0.38
L	**1.74**	**2.16**	**2.73**	**3.06**	**3.97**	**4.47**	**4.59**	**4.22**
L68A	1.74	2.16	2.73	3.06	3.97	4.47	4.59	4.22
M	**8.46**	**10.03**	**13.63**	**16.09**	**18.54**	**18.54**	**18.15**	**14.38**
M69_M70	3.56	4.29	5.83	6.86	8.14	8.62	8.48	6.34
M71	2.33	2.48	3.50	4.30	5.06	4.76	4.63	3.61
M72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
M73	1.65	1.85	2.40	2.84	3.02	2.99	2.91	2.48
M74_M75	0.91	1.41	1.91	2.08	2.32	2.17	2.12	1.93
N	**5.88**	**7.15**	**9.39**	**11.34**	**13.88**	**14.12**	**14.25**	**12.75**
N77	0.68	0.91	1.20	1.74	2.25	2.43	2.74	2.57
N78	0.13	0.22	0.23	0.26	0.48	0.48	0.49	0.45
N79	0.22	0.28	0.31	0.30	0.33	0.32	0.29	0.20
N80-N82	4.85	5.74	7.64	9.03	10.82	10.89	10.72	9.53
O	**0.13**	**0.33**	**0.30**	**0.45**	**0.48**	**0.48**	**2.44**	**2.00**
P	**2.78**	**3.61**	**4.78**	**6.33**	**7.58**	**7.67**	**7.78**	**6.90**
Q	**2.14**	**3.03**	**4.52**	**5.56**	**6.12**	**6.03**	**5.93**	**4.85**
Q86	1.79	2.41	3.75	4.70	5.20	5.01	4.96	4.01
Q87_Q88	0.35	0.62	0.77	0.85	0.92	1.02	0.97	0.84
R	**0.72**	**1.08**	**1.16**	**1.46**	**1.77**	**1.93**	**1.81**	**1.41**
R90-R90	0.38	0.50	0.51	0.72	0.81	0.88	0.84	0.64
R93	0.34	0.58	0.64	0.75	0.96	1.05	0.98	0.76
S	**2.07**	**2.57**	**3.09**	**3.58**	**4.10**	**4.20**	**4.83**	**4.37**
S94	1.06	1.12	1.26	1.32	1.41	1.46	2.10	1.86
S95	0.35	0.55	0.69	0.77	0.84	0.87	0.93	0.77
S96	0.65	0.91	1.14	1.48	1.85	1.87	1.80	1.74
T	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
U	**0.05**	**0.04**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
HH total	**1 455.67**	**1 297.31**	**1 438.20**	**1 604.97**	**1 760.96**	**1 741.33**	**1 618.21**	**1 348.77**
HH Transport	1 455.67	1 297.31	1 438.20	1 604.97	1 760.96	1 741.33	1 618.21	1 348.77
HH Heating/cooling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HH Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

CNG in TJ								
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
A-U 1-99	**217.49**	**300.63**	**339.92**	**170.99**	**156.11**	**121.09**	**135.79**	**116.27**
A	**0.11**	**0.15**	**0.18**	**0.10**	**0.12**	**0.08**	**0.09**	**0.13**
A01	0.11	0.15	0.18	0.10	0.12	0.08	0.09	0.13
A02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
C	**0.16**	**1.11**	**1.42**	**0.90**	**1.46**	**1.20**	**1.41**	**1.33**
C10-C12	0.03	0.14	0.20	0.20	0.33	0.29	0.37	0.32
C13-C15	0.00	0.05	0.07	0.04	0.04	0.03	0.03	0.05
C16	0.00	0.10	0.13	0.07	0.09	0.06	0.06	0.06
C17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C18	0.00	0.05	0.07	0.04	0.04	0.03	0.03	0.03
C19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02

CNG in TJ								
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
C24	0.04	0.19	0.25	0.13	0.42	0.35	0.38	0.33
C25	0.00	0.10	0.13	0.11	0.13	0.12	0.15	0.11
C26	0.04	0.05	0.05	0.03	0.03	0.02	0.02	0.02
C27	0.00	0.00	0.00	0.00	0.04	0.06	0.03	0.06
C28	0.00	0.10	0.13	0.07	0.09	0.06	0.09	0.10
C29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C31_C32	0.00	0.15	0.16	0.09	0.10	0.07	0.07	0.05
C33	0.03	0.19	0.25	0.13	0.16	0.11	0.17	0.17
D	**0.03**	**0.05**	**0.07**	**0.07**	**0.13**	**0.12**	**0.10**	**0.12**
E	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
E36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E37-E39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	**0.50**	**0.87**	**1.13**	**0.95**	**1.68**	**1.50**	**1.89**	**1.82**
G	**1.20**	**2.87**	**4.05**	**2.52**	**4.68**	**3.56**	**4.25**	**4.27**
G45	0.36	0.58	0.82	0.51	0.58	0.50	0.63	0.73
G46	0.51	1.18	1.75	1.15	2.61	2.06	2.43	2.28
G47	0.32	1.11	1.49	0.86	1.50	1.00	1.19	1.26
H	**213.52**	**290.10**	**325.90**	**160.30**	**139.32**	**107.49**	**119.42**	**101.60**
H49	213.49	289.90	325.63	160.15	139.11	107.36	118.52	100.82
H50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H52	0.03	0.19	0.26	0.14	0.21	0.06	0.13	0.06
H53	0.00	0.00	0.00	0.00	0.00	0.06	0.78	0.72
I	**0.20**	**0.39**	**0.46**	**0.32**	**0.55**	**0.43**	**0.52**	**0.42**
J	**0.12**	**0.36**	**0.46**	**0.33**	**0.46**	**0.29**	**0.34**	**0.24**
J58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
J59_J60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
J61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
J62_J63	0.12	0.36	0.46	0.33	0.46	0.29	0.34	0.24
K	**0.00**	**0.00**	**0.00**	**0.14**	**0.43**	**0.39**	**0.39**	**0.28**
K64	0.00	0.00	0.00	0.14	0.43	0.39	0.39	0.28
K65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
K66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L	**0.12**	**0.34**	**0.49**	**0.41**	**0.56**	**0.48**	**0.55**	**0.43**
L68A	0.12	0.34	0.49	0.41	0.56	0.48	0.55	0.43
M	**0.40**	**1.60**	**2.07**	**1.53**	**1.90**	**1.67**	**1.94**	**1.44**
M69_M70	0.03	0.39	0.51	0.41	0.53	0.46	0.52	0.50
M71	0.13	0.29	0.36	0.27	0.32	0.34	0.40	0.36
M72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M73	0.11	0.72	1.00	0.71	0.89	0.73	0.82	0.36
M74_M75	0.12	0.19	0.21	0.14	0.16	0.14	0.21	0.22
N	**0.48**	**1.34**	**1.83**	**2.40**	**3.46**	**2.92**	**3.25**	**2.56**
N77	0.12	0.45	0.62	1.69	2.55	2.15	2.40	1.86
N78	0.00	0.05	0.05	0.03	0.03	0.02	0.04	0.04
N79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N80-N82	0.36	0.84	1.16	0.68	0.88	0.75	0.81	0.66
O	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.33**	**0.34**
P	**0.20**	**0.29**	**0.34**	**0.22**	**0.30**	**0.21**	**0.35**	**0.34**
Q	**0.13**	**0.34**	**0.39**	**0.21**	**0.29**	**0.23**	**0.31**	**0.30**
Q86	0.04	0.24	0.29	0.16	0.23	0.19	0.20	0.20
Q87_Q88	0.09	0.10	0.10	0.05	0.06	0.04	0.11	0.10
R	**0.03**	**0.16**	**0.20**	**0.10**	**0.16**	**0.11**	**0.11**	**0.11**
R90-R90	0.03	0.05	0.07	0.04	0.04	0.03	0.03	0.03
R93	0.00	0.12	0.13	0.07	0.11	0.08	0.08	0.08
S	**0.27**	**0.68**	**0.93**	**0.50**	**0.60**	**0.42**	**0.55**	**0.53**
S94	0.22	0.29	0.36	0.19	0.23	0.19	0.27	0.26

CNG in TJ								
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
S95	0.00	0.05	0.07	0.04	0.04	0.03	0.03	0.09
S96	0.04	0.34	0.51	0.27	0.33	0.20	0.25	0.18
T	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
U	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
HH total	**176.91**	**199.74**	**122.03**	**63.54**	**67.13**	**48.47**	**27.23**	**26.90**
HH Transport	176.91	199.74	122.03	63.54	67.13	48.47	27.23	26.90
HH Heating/cooling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HH Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Liquid biofuels in TJ								
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
A-U 1-99	**1 676.85**	**1 346.92**	**2 068.00**	**2 122.63**	**2 871.92**	**3 082.43**	**3 066.00**	**2 397.82**
A	**26.87**	**23.50**	**38.90**	**31.22**	**48.42**	**52.84**	**65.36**	**54.75**
A01	18.64	16.22	25.64	19.91	28.94	38.60	42.55	38.97
A02	8.19	7.22	13.18	11.24	19.36	14.11	22.70	15.64
A03	0.04	0.06	0.07	0.07	0.13	0.14	0.12	0.14
B	**2.77**	**0.78**	**2.06**	**1.64**	**1.55**	**1.25**	**2.29**	**1.60**
C	**61.05**	**68.35**	**102.89**	**103.19**	**140.73**	**156.20**	**172.70**	**165.41**
C10-C12	14.84	11.90	25.48	18.00	27.04	27.38	38.70	21.03
C13-C15	1.82	2.58	3.24	3.70	4.53	4.77	5.01	6.29
C16	9.54	9.12	12.19	22.04	20.75	25.79	29.82	27.41
C17	0.40	0.52	0.75	0.64	1.11	1.19	1.07	1.28
C18	1.01	1.31	1.90	1.64	2.28	4.74	2.55	3.88
C19	0.06	0.02	0.06	0.05	0.04	0.04	0.04	0.11
C20	0.68	1.20	1.25	1.08	1.82	2.60	1.48	1.86
C21	0.10	0.13	0.17	0.16	0.21	0.23	0.26	0.33
C22	3.38	2.99	5.52	3.78	5.30	5.83	6.15	7.17
C23	4.39	4.63	6.46	6.30	13.34	11.14	16.12	13.42
C24	2.23	1.37	2.41	1.62	2.97	2.02	2.25	2.70
C25	11.10	14.88	21.88	19.64	27.84	35.80	31.75	36.26
C26	0.65	1.06	1.23	1.16	1.81	2.36	2.07	2.60
C27	1.75	2.00	2.70	3.14	6.06	5.53	5.87	9.11
C28	2.46	5.27	3.78	8.77	6.96	9.04	9.59	9.41
C29	1.13	1.25	1.39	1.32	2.95	2.47	4.19	4.21
C30	0.32	1.07	0.31	0.33	0.74	0.51	0.48	0.52
C31_C32	2.31	2.77	6.12	3.90	5.86	5.96	6.10	6.82
C33	2.87	4.27	6.07	5.91	9.13	8.80	9.18	11.00
D	**0.66**	**1.07**	**1.32**	**1.27**	**2.24**	**2.22**	**2.47**	**2.42**
E	**4.67**	**4.30**	**6.31**	**7.72**	**9.24**	**11.63**	**11.71**	**10.34**
E36	1.64	1.26	1.99	1.86	2.89	2.92	3.27	3.05
E37-E39	3.03	3.03	4.32	5.86	6.34	8.70	8.44	7.30
F	**56.14**	**64.16**	**90.35**	**92.68**	**129.60**	**140.79**	**151.29**	**147.17**
G	**165.32**	**155.89**	**213.10**	**238.23**	**344.19**	**388.25**	**383.92**	**325.00**
G45	22.63	19.58	28.22	25.73	49.78	66.16	70.00	61.54
G46	82.83	74.56	91.62	118.52	164.23	173.03	161.89	139.03
G47	59.85	61.75	93.26	93.98	130.17	149.06	152.03	124.43
H	**1 211.01**	**845.55**	**1 364.19**	**1 378.87**	**1 769.05**	**1 870.89**	**1 743.85**	**1 141.61**
H49	1 115.43	783.63	1 270.54	1 285.33	1 618.87	1 740.54	1 626.79	1 068.86
H50	0.04	0.06	0.61	0.07	0.10	0.59	0.12	0.40
H51	0.05	0.07	0.08	0.11	0.16	0.17	0.22	0.20
H52	91.87	59.90	85.52	88.88	139.38	121.57	106.81	63.41
H53	3.63	1.89	7.43	4.48	10.54	8.03	9.92	8.74
I	**12.34**	**17.67**	**17.59**	**19.81**	**27.43**	**33.75**	**33.76**	**31.40**
J	**8.71**	**13.53**	**19.07**	**19.61**	**27.66**	**36.25**	**32.30**	**35.74**
J58	0.94	1.34	1.77	1.83	2.45	2.67	3.00	3.14
J59_J60	1.07	1.54	2.00	1.97	2.87	3.09	3.15	3.55
J61	0.63	1.24	1.65	1.72	2.45	2.58	2.62	2.89

Liquid biofuels in TJ								
Category	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
J62_J63	6.07	9.41	13.65	14.09	19.90	27.91	23.53	26.15
K	**2.47**	**4.13**	**5.37**	**7.92**	**16.12**	**18.93**	**26.37**	**26.57**
K64	1.27	2.22	2.88	5.36	12.53	15.25	21.80	21.44
K65	0.09	0.25	0.33	0.37	0.55	0.46	1.25	1.27
K66	1.12	1.66	2.15	2.19	3.04	3.22	3.32	3.86
L	**15.46**	**17.99**	**22.44**	**26.72**	**41.02**	**43.71**	**42.47**	**44.92**
L68A	15.46	17.99	22.44	26.72	41.02	43.71	42.47	44.92
M	**45.89**	**54.04**	**70.17**	**76.43**	**111.15**	**123.66**	**126.28**	**141.48**
M69_M70	24.05	30.49	33.64	41.22	64.65	69.45	72.56	75.24
M71	7.06	10.77	14.34	14.79	21.80	23.11	24.47	26.84
M72	0.36	0.58	0.75	0.72	0.98	1.08	1.27	1.62
M73	7.81	6.05	12.17	9.83	13.35	15.37	15.51	20.22
M74_M75	6.62	6.15	9.27	9.87	10.36	14.64	12.46	17.57
N	**37.84**	**42.75**	**68.03**	**70.71**	**140.58**	**130.42**	**189.26**	**175.06**
N77	17.16	15.41	25.59	34.65	58.92	62.90	98.24	94.69
N78	1.19	1.30	1.93	1.88	2.66	3.09	4.87	4.30
N79	2.63	3.01	6.10	4.54	9.25	7.95	8.81	5.67
N80-N82	16.86	23.03	34.41	29.63	69.75	56.48	77.34	70.40
O	**2.13**	**2.91**	**3.61**	**3.36**	**4.40**	**4.30**	**14.56**	**16.00**
P	**3.96**	**5.61**	**8.03**	**7.99**	**10.48**	**14.24**	**14.84**	**15.48**
Q	**8.55**	**12.66**	**16.73**	**16.79**	**23.84**	**25.32**	**27.49**	**32.19**
Q86	7.89	11.76	15.53	15.62	22.23	23.60	24.73	28.85
Q87_Q88	0.66	0.90	1.21	1.17	1.61	1.73	2.76	3.34
R	**3.94**	**5.26**	**7.72**	**8.10**	**11.41**	**10.78**	**10.94**	**12.83**
R90-R90	1.12	1.71	2.15	2.18	2.99	3.55	4.18	4.45
R93	2.82	3.54	5.57	5.92	8.42	7.24	6.76	8.38
S	**6.92**	**6.62**	**9.91**	**10.15**	**12.56**	**16.70**	**13.86**	**17.56**
S94	1.87	2.37	3.43	3.10	4.08	4.56	5.15	5.87
S95	0.94	1.32	1.74	2.80	2.49	3.99	2.76	3.40
S96	4.11	2.93	4.74	4.25	5.99	8.15	5.95	8.28
T	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
U	**0.13**	**0.16**	**0.24**	**0.23**	**0.26**	**0.31**	**0.26**	**0.28**
HH total	**2 430.14**	**3 275.46**	**3 022.58**	**2 730.08**	**3 532.17**	**3 653.47**	**3 343.10**	**4 014.87**
HH Transport	2 430.14	3 275.46	3 022.58	2 730.08	3 532.17	3 653.47	3 343.10	4 014.87
HH Heating/cooling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HH Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00