

**Ministry of Infrastructure of Ukraine  
(former Ministry of Transport and Communications)  
State Enterprise «State Road Transport Research Institute»  
(SE SRTRI)**

# **Estimation of Road Transport Emissions with application of Higher Level Methods**

**Part 1. SE SRTRI brief introduction.  
Why road transport is so important in terms of emission?**

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**Tbilisi, Georgia, 11-12 December 2013**

**Some related to emission inventory activity features of the SE SRTRI (were the key arguments for the State Environment Investment Agency of Ukraine to hire SE SRTRI):**

- SE SRTRI is the main Ukrainian institution responsible for Road Transport sector**
- SE SRTRI serves the Ministry of Infrastructure of Ukraine (former Ministry of Transportation) to provide scientific background of the State policy in the Road Transport Sector of Economy including Environmental Aspects**
- SE SRTRI is Working Body of Ukraine under the Geneva (UN/ECE) Agreement of 1958 year with amendments of 1995 year “Concerning the adoption of uniform technical prescriptions for wheeled vehicles...”**
- SE SRTRI is Certification Body on vehicles and engines**
- SE SRTRI have accredited laboratories capable to conduct tests of vehicles according to the international standards including emission investigation (national emission coefficients in real conditions etc.)**



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**Some latest (during 2012-2013) results of the State Road Transport Research Institute activities, related to the field of Road Transport Emission, and some related ongoing projects (1):**

- 1. 1990-2010 first in Ukraine higher level emission investigation (as part of National GHG Inventory of 2012 year).**
- 2. New Fuel Rationing System for Road Transport (an instrument to control and minimize motor fuel expenses in different road conditions by fleet owners).**
- 3. EURO-2 – EURO-6 norms stepwise introduction plan in Ukraine (the Law).**

# **Закон Украины**

## ***«О некоторых вопросах ввоза на таможенную территорию Украины и регистрации транспортных средств»***

(С изменениями, внесенными  
Законом Украины  
от 6 июля 2012г №5177-VI)

**Поэтапное введение экологических норм для автомобилей:**

**ЄВРО-3 - с 01.01.2013** *(в ЕС с 2000-2001)*

**ЄВРО-4 - с 01.01.2014** *(в ЕС с 2006)*

**ЄВРО-5 - с 01.01.2016** *(в ЕС с 2010)*

**ЄВРО-6 - с 01.01.2018** *(в ЕС с 2015)*



**Some latest (during 2012-2013) results of the State Road Transport Research Institute activities, related to the field of Road Transport Emission, and some related ongoing projects (2):**

**4. NEW technology was developed to more precise measure emission of clean vehicles (so called Variable Volume Sampling System).**

**5. Biodiesel emission research program started just now.**

**6. Different market traditional and alternative fuels R&D tests (on request of oil companies).**

**7. Carbon content and quality of market fuels research started.**

**8. Off-cycle road transport emission investigation started (actual national emission factors research). Test-bench and on road exhaust measurements as well as air pollution investigation.**

**9. Participation in AIR-Q-GOV Regional Pilot Project (RPP-3) in Kyiv, Ukraine was preplanned and is under consideration.**

**Why road transport is so  
important in terms of  
emission?**

# 1. Road transport contribution

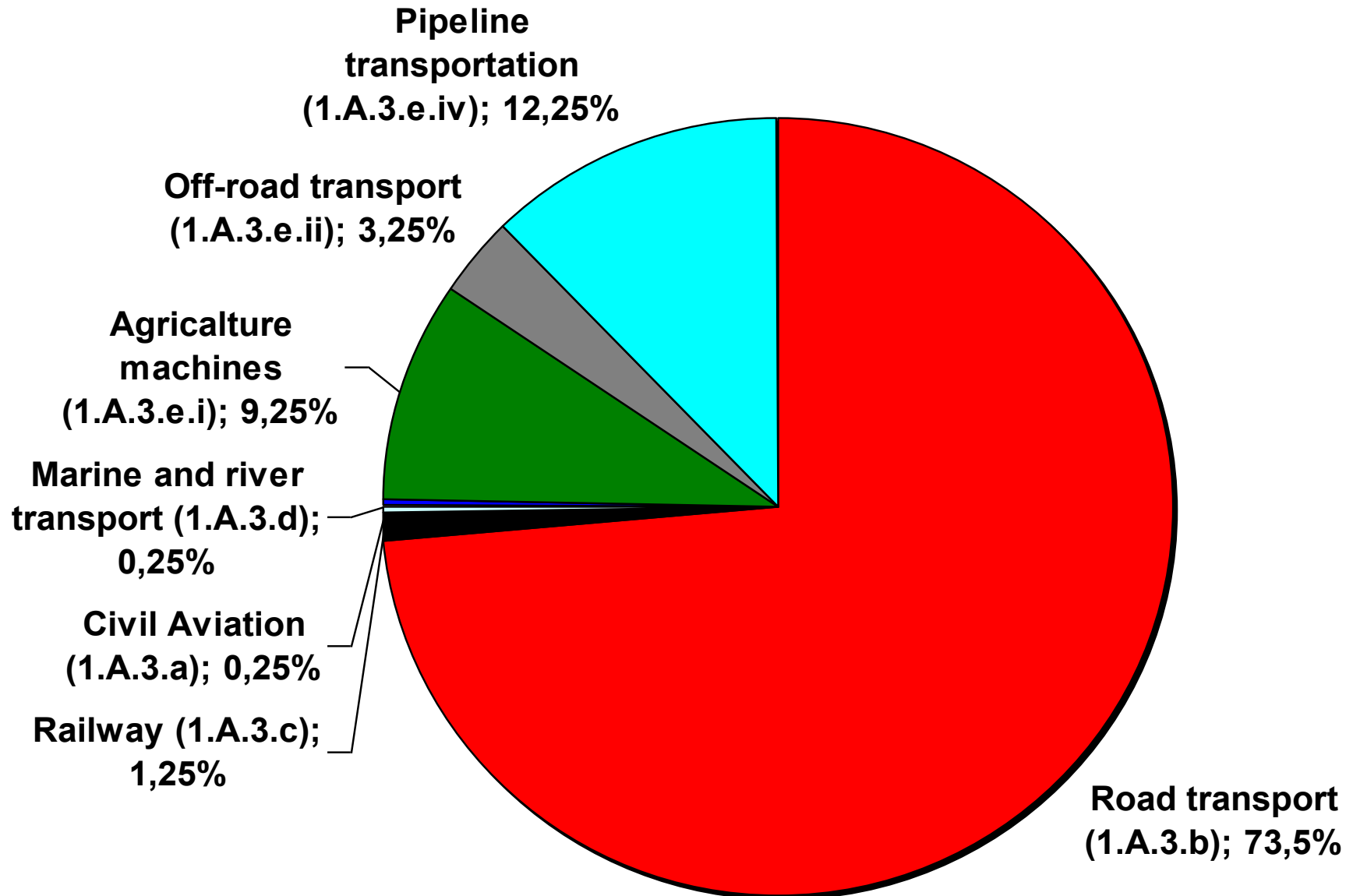
Национальный кадастр антропогенных выбросов из источников и абсорбции поглотителями ПГ в Украине за 1990-2010 гг.

Таблица 3.14. Выбросы ПГ в категории «Транспорт», млн. т CO<sub>2</sub>-экв.

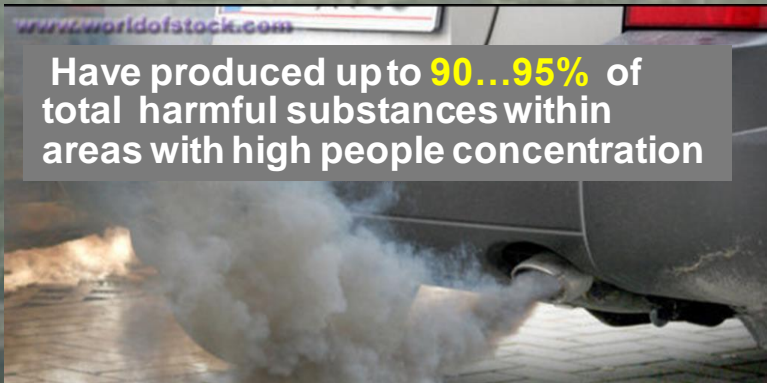
Категория выбросов	1990	2009	2010
1.A.3 Транспорт всего, в том числе	91,1	40,7	40,0
1.A.3.a Гражданская авиация	0,8	0,1	0,1
1.A.3.b Дорожный транспорт	47,3	29,8	29,4
1.A.3.c Железнодорожный транспорт	3,8	0,4	0,5
1.A.3.d Морской и речной транспорт	2,6	0,1	0,1
1.A.3.e Другие виды транспорта, всего, в том числе	36,6	10,2	9,9
1.A.3.e.i Сельскохозяйственные машины и механизмы	19,8	3,5	3,7
1.A.3.e.ii Внедорожный транспорт	2,0	1,1	1,3
1.A.3.e.iii Прочие	5,4	0,0	0,0
1.A.3.e.iv Трубопроводный транспорт	9,4	5,5	4,8



# Road transport contribution



**Place of major emission of road transport is very close to town people location (i.e. is dominant negative factor with respective health and macro-economical damages)**



**Ukrainian Annual Economic Losses (External Expenses) due to wheeled vehicles emission can be approximately estimated in  $\approx$  **2...3 billion Euro****



**The State Authorities in the field of Road Transport Emission Inventory in Ukraine**

**Ministry of Ecology and Natural Resources of Ukraine**

**<http://menr.gov.ua/>**





# The end of the part 1

## Thank you for your attention!

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