



Republic of Serbia
Ministry of Agriculture and
Environmental Protection



Fuel quality improvements in the Republic of Serbia

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Environment and the fuel quality issues

There is a direct linkage between:

Fuels quality and fuels standards;

Fuels quality testing and monitoring;

Crude oil production on national level and import of fuels;

Air emissions from the mobile sources;

Vehicles number, age structure and distribution according the type of fuels;

Air pollution monitoring;

Air quality assessment;



Institutional framework on fuel quality regulation and enforcement

Ministry of Mining and Energy

responsible for issuing regulations which prescribe the liquid fuels quality, as well as for determination of maximum level of oil derivatives prices

Ministry of Trade

responsible for quality control of goods which are distributed on the market of Republic of Serbia

*** Trade Inspectorate within the Ministry of Trade**

fuel quality control and for enforcing breaches of the national provisions

Ministry of Finance

responsible for excise and tax policy

Institute for Standardization

responsible for the adoption of Standard

Serbian Accreditation body

performs work related to accreditation of competent laboratories

Situation on fuel quality over the past years

- *Rulebook on technical and other requirements for liquid fuels of crude oil origin*



	Type	Rulebook Maximum allowed lead content [g/L]	HM protocol Annex VI
Unleaded motor petrol	PREMIUM 95	0,013* * Until 2013	0,013/0,15
	REGULAR 92		
(leaded) Motor petrol* * Until 2010	Normal MB 86	0,600	
	Regular MB 92	0,400	
	Premijum MB 95	0,400	
	Super MB 98	0,600	

	Type	Rulebook Maximum allowed sulphur content [mg/kg]	Gothenburg protocol Annex VIII
Unleaded motor petrol	PREMIUM 95	650*	50
	REGULAR 92		
Diesel fuel*	D2	10.000	
	D2S	2.000	
	D1E	5.000	

* Until 2013

Statements from the national strategic documents concerning fuel quality in that time

Energy sector development strategy of the Republic of Serbia to 2015, for period of 2007-2012 (2005)

*"The improvement of the petrol and diesel fuels quality, i.e. reaching the European level in the quality of oil derivatives in the domestic refineries is also not only an **environmental objective** determined by this Strategy, but also a **political objective** for the purpose of the accession of Serbia to the EU. It is possible to achieve this objective only by the modernization of the existing installations and the construction of new ones..."*

The Law on Ratification of Agreement between the Government of the Republic of Serbia and the Government of the Russian Federation on cooperation in the field of oil and gas economy (Official Gazette of RS - International Agreements No. 83/2008)

*"... The **current requirements** in terms of quality of oil products produced during the period until completion of the reconstruction and modernization of the technological complex of the Petroleum Industry of Serbia, **must be retained.**"*

National Program for Integration in EU (2008) defined that in 2012 **at earliest** a technical regulations introducing provisions of the EU Directives related to the quality of petrol and diesel fuel must be developed

NIS (Petroleum Industry of Serbia)



- Strategic goals until 2015 predict full adjustment with European and national principles of environmental protection, as well as improvement of technologies and products and construction of new facilities

- Only one company which produces oil derivatives in the Republic of Serbia
- The project of modernization of the Refinery in the city of Pančevo is the result of the Agreement on strategic cooperation between the Russian Federation and Republic of Serbia in oil and gas field signed in 2008
- Gazprom Neft's subsidiary NIS has completed in 2012 a major modernisation project of its refining capacity in Serbia
- The company has started operating a new light hydro-cracking and motor fuel hydro-treatment facility (MHC/DHT) at Pančevo refinery

Source: www.nis.eu

Steps undertaken to improve the environmental protection

- ✓ Gazprom Neft has invested EUR 547 million at NIS in upgrading and rebuilding, including EUR 397 million on building the hydro-cracking facility in Pančevo refinery and over EUR 150 million on modernising the refinery infrastructure, equipping the hydrogen facility and on ecological projects
- ✓ Environmental projects are primarily guided by the concept of cleaner production and application of best available techniques (BAT)
- ✓ In **2010** the production of leaded petrol was phased out
- ✓ Since **2011** the content of Pb in petrol produced in country has been reduced to **0.013 g/l**
- ✓ Since **2013**, there is production only of petrol that meets the EU standard (Pb **0,005 g/l**) and diesel fuel with **10 mg/kg** of S



Source: www.nis.eu

Present status of the legal framework on fuel quality

Law on technical requirements for products and conformity assessment
(Official Gazette of RS, No 36/09)



The Rulebook on technical and other requirements for liquid fuels of crude oil origin (O.J. R.S 123/2012, 63/2013, 75/2013)

*Unleaded fuel can be placed on the market only if it complies with the **SRPS EN 228** Standard*

*Diesel fuel can be placed on the market only if it complies with the **SRPS EN 590** Standard*



Present fuel quality requirements

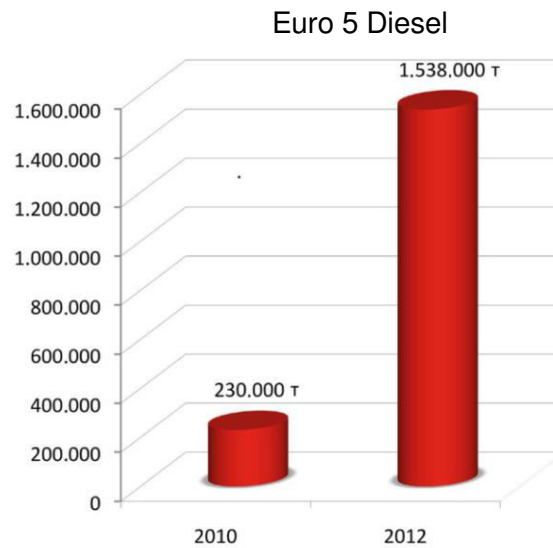
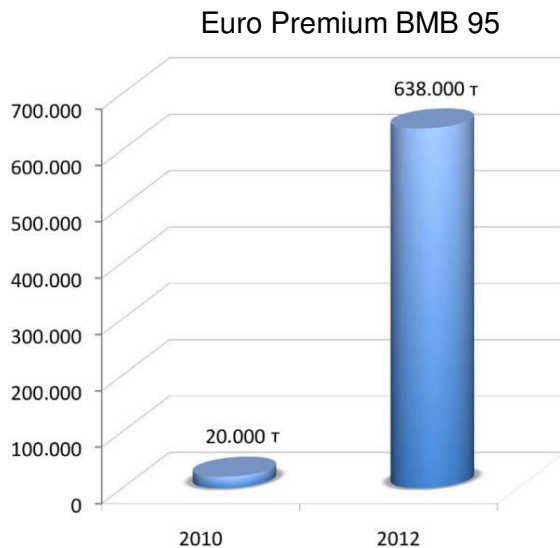
Level of compliance with EU Fuel Quality Directive 98/70/EC as amended by Directive 2009/30/EC

	PETROL		GAS OILS
	max S content	max Pb content	max S content
Directive 98/70/EC	10 mg/kg	0.005 g/l	1000/ 10 mg/kg <small>*01.01.2011</small>
EURO BMB 98 (EN 228)	10 mg/kg	0.005 g/l	
EURO PREMIUM BMB 95 (EN 228)	10 mg/kg	0.005 g/l	
EURO DIESEL (EN 590)	/	/	10 mg/kg
GAS OIL 0.1 (non-road mobile machinery, agricultural and forestry tractors)	/	/	1000 mg/kg
GAS OIL EURO (energy fuel)	/	/	0.1 %

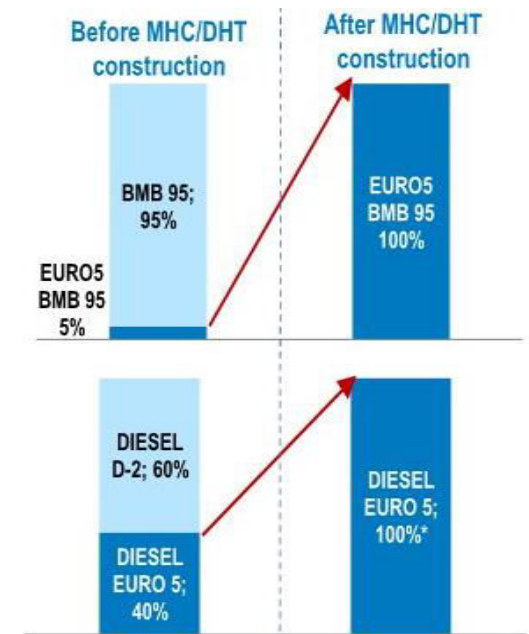


NIS (Petroleum Industry of Serbia)

Production of petrol and diesel fuels that meets the EU standards



tones/year

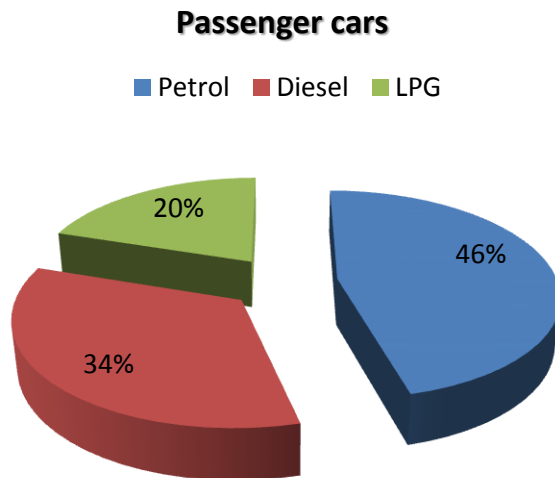


*Data for 2014 and 2015

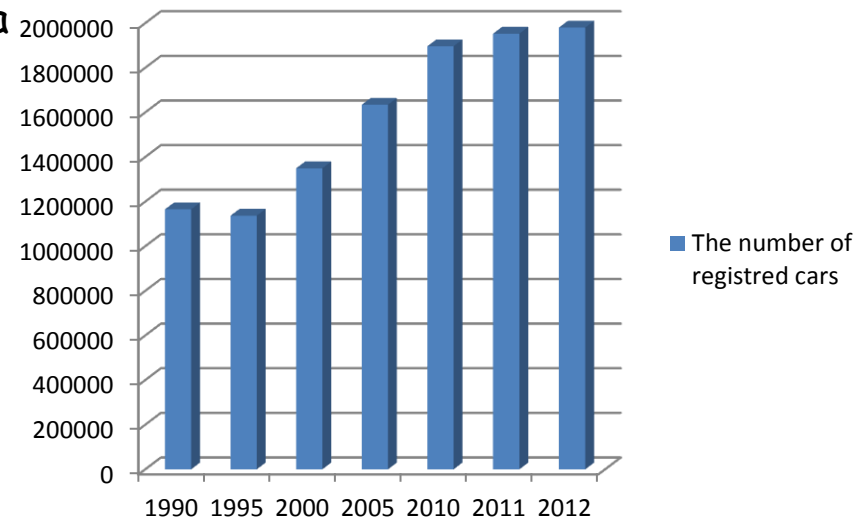
Source: www.nis.eu

State of the vehicles fleet in Serbia

- The transport volume has been importantly increased in the period between 1995 and 2012
- Total number of road vehicles (cars, LDV, HDV, mopeds & motorcycles) in Serbia for 2012 is **1.980.069** source: Ministry of Interior
- The average age of passenger cars in Serbia is **14,8** years

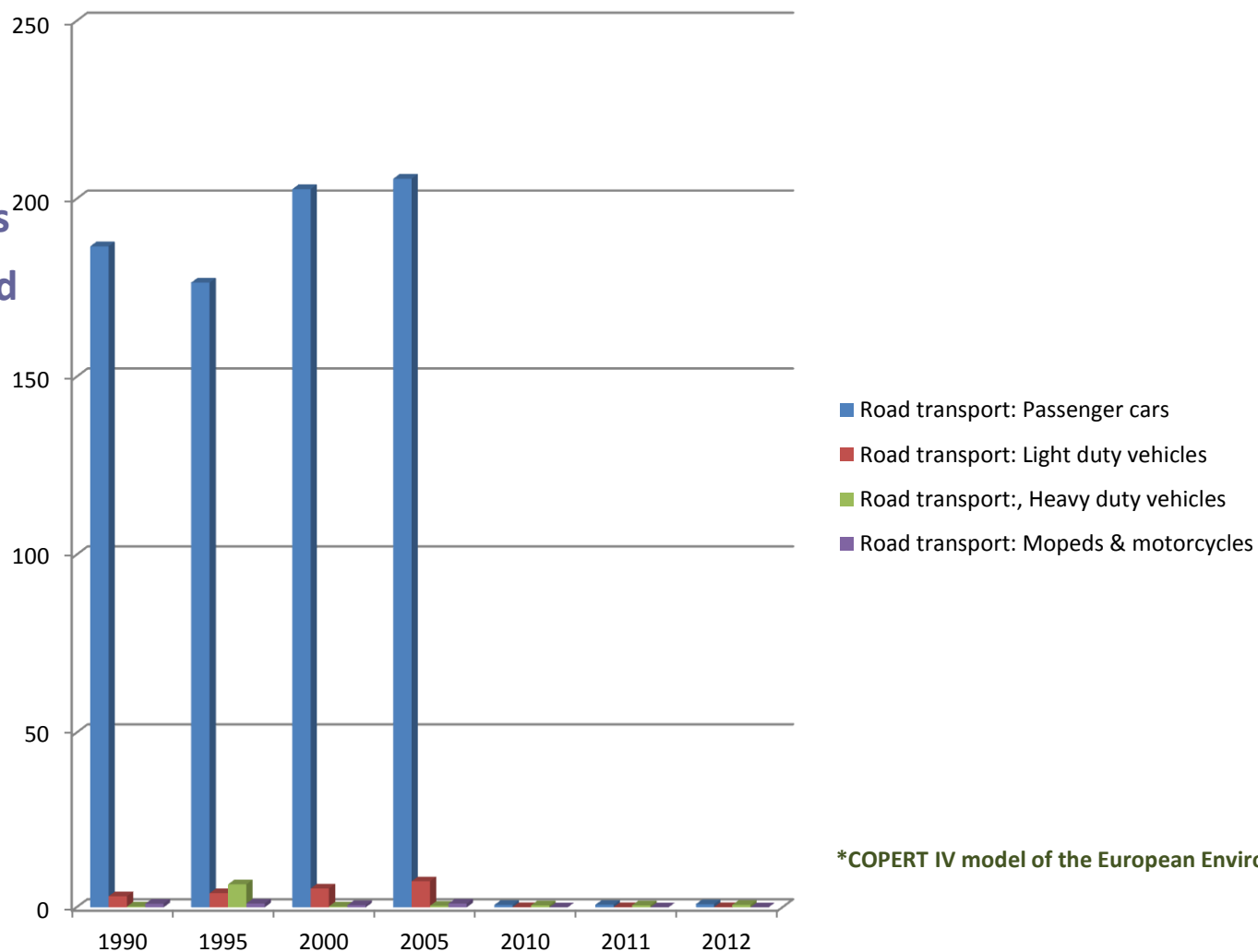


The number of registered cars 1990-2012



Improvements in reducing Pb emissions in the air

Pb emissions
from the road
transport



*COPERT IV model of the European Environmental Agency

Main conclusions and further efforts

- Since 2010 significant progress has been achieved on the national legislation and implementation in the field of fuel quality → placing leaded petrol on the market was banned!
- Meeting the requirements of European standards for Euro 5 product quality
- **Ratification of the 1998 Protocol on heavy metals in 2012**
- Total emissions of Pb originated from road transport are now significantly reduced compared to previous years
- The need to continue with the efforts towards EU requirements on fuels quality → sulphur content in heavy fuel oil used in plants is still significantly high (3%)
→ SO₂ emissions in the air



Thank you

