

Current status of Lead and Sulphur in Fuels in Central and Eastern Europe, the Caucasus and Central Asia

Country	Lead		Sulphur max allowable by law		
	Current Status	Comments	Diesel	Petrol	Comments
Albania	Unleaded	Imports of leaded petrol banned 07/2005. National legislation limit is 0.005 g/l for lead.	2,000	150	2000 ppm domestic refinery production (20 percent market share), 350 ppm diesel imported. The Ballsh refinery has been privatized in 2008. Two Decrees of the Council of Ministers (2008 and 2009) have been issued regarding fuel quality, with plans as follows: 01/01/2009 - 31/12/2009: max 350 ppm diesel (allowing up to 2000 ppm for domestic products); 01/01/2010 - 31/12/2010: max 350 ppm diesel 01/01/2011 - 31/12/2011: max 150 ppm diesel; 01/01/2012 - onwards: max 10 ppm diesel
Armenia	Unleaded	Unleaded from October 2001.	350	150/500	Armenia imports; 150 ppm petrol also available on market. Plans to transition to 50 ppm then 10 ppm petrol and diesel sulphur from 1 January 2010
Azerbaijan	Unleaded	Has not produced leaded petrol since 1995. Has not been available since	2,000	1000	Follows GOST standards 305-82 for diesel fuels.** Reduction of diesel sulphur content to 500

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		January 1 st , 1997			ppm by 2015. Gasoline produced meets 'Euro 2' grade standard. GOST 2084-77 for Petrol Automotive.
Belarus	Unleaded	Ban since 1998.	350	500	Adopted EN 228:1993 since 09/1993. Draft state standard EN 228-2004 for unleaded gasoline requires sulphur content of 150ppm up to 01/01/2010, with a switch to 10ppm from 2011. Technical regulation TR 2008/011/BY will be introduced from 01.01.2010 and set up 50 ppm as a limit for sulfur content in diesel with switch to 10ppm from 2011.
Bosnia and Herzegovina	Dual	Deadline for leaded petrol to be banned as of January 1, 2010 passed without official confirmation from government. Imports some unleaded.	350	150	Over 97 percent of fuel imported from neighboring countries, including Serbia. Certain leftovers of leaded fuel allowed on the market until March 2010, although still without confirmation of official ban. Target date of 2012 for production of Euro 5 fuel due to modernization of refinery

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Bulgaria	Unleaded	Ban since 2004.	10	10	Follows EU Fuel and Vehicle Directives
Croatia	Unleaded	Ban since 2006.	10	10	New regulation adopted May 2006 transposing 98/70/EC and 1999/32/EC. Rijeka and Sisak refinery upgrades have started, will continue to 2012 and will cost EUR 750 million. Plans 10ppm fuel introduction in 2009. Petrol and diesel fuel sulphur grades 11-50 ppm is placed on the market according to Governmental decision.
Cyprus	Unleaded	Ban since May 2004.	10	10	Follows EU Fuel and Vehicle Directives
Czech Republic	Unleaded	Ban since 2001.	10	10	Follows EU Fuel and Vehicle Directives
Estonia	Unleaded	Ban since May 2001.	10	10	Follows EU Fuel and Vehicle Directives
Georgia	Unleaded	Ban since 2000.	350	500	Imports fuel. Gradual move to 50 ppm petrol by 2011; 50 ppm diesel by 2010. Introduction of new sulphur standard for gasoline - 250ppm - from 01/01/2009, 100ppm from 01/01/2010.
Hungary	Unleaded	Ban since 1999.	10	10	Follows EU Fuel and Vehicle Directives
Kazakhstan	Unleaded		2,000	500	In 2008 Euro 2 fuel grade standard

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					introduced, plans to move to 10 ppm by 2010.
Kyrgyzstan	Unleaded	Ban since 2002.	2,000	1,000	In 2008 'Euro 3' grade fuels were introduced by Gazprom (150 ppm for petrol, 350 ppm for diesel). The country imports fuel from Russia, Kazakhstan, Turkmenistan and Azerbaijan.
Latvia	Unleaded	Ban since 2001.	10	10	Follows EU Fuel and Vehicle Directives
Lithuania	Unleaded	Ban since 2001.	10	10	Follows EU Fuel and Vehicle Directives
Montenegro	Dual	Imports from Serbia. Leaded fuel to be banned 01/01/2011, with lead level < 5 mg/l.	2000	1,000	Imports from Serbia. Leaded petrol with market share of approximately 25%, and plans to go completely unleaded by 1/1/2011. The market of fuels in Montenegro is divided between Jugopetrol-Kotor, which covers about 90% of the imported and distributed fuels, Montenegro Bonus, which participates with less than 5%, while the other 5% is divided between 40 smaller importers/distributors. Majority of leaded fuels is distributed and owned by the smaller importers.

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Poland	Unleaded	Ban since 2003.	10	10	Follows EU Fuel and Vehicle Directives
Moldova	Unleaded	Ban since 2002.	2,000	500	From 2007 Lukoil Moldova started to sell EN-590 Euro diesel (10ppm) and 'Euro 4' (50 ppm) grade diesel. Rompetrol Moldova sells 'Euro 4' grade fuel, while Petrom Moldova 'Euro 5' (10 ppm) grade gasoline.
Romania	Unleaded	Ban since 2004.	10	10	
Russia	Unleaded	Ban since 2003.	350	150	Various grades on the market: Lukoil has launched Euro 4 diesel production (50 ppm) in Moscow and St. Petersburg. Petrol standards allow 'Euro 2' grade fuel through 2010, with plans for upgrades to 'Euro 3' from 2012, 'Euro 4' from 2014. 2,000 ppm diesel to be allowed through 2014. Sulphur levels of 50 mg/kg to be allowed by law until 31 Dec. 2012
Serbia	Dual	Ban planned for 2012.	10,000	2,000	Domestic refineries produce 10,000 ppm diesel and a 350 ppm 'EKO' diesel grade, with very small

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					<p>quantities of 50 ppm diesel produced at Pancevo refinery. Lower sulphur diesel is imported in limited quantities. Plans underway to introduce 2003/17/EC fuels in 2010. Multiple grades of diesel available on the market:</p> <ul style="list-style-type: none"> -Euro 3 Diesel max 350 ppm -Diesel Oil D2 max 10000 ppm -Diesel D2S max 2000 ppm -Diesel D1E max 5000 ppm <p>Multiple grades of petrol available on the market: 650 ppm unleaded gasoline BMB 95 and 1000 ppm leaded gasoline MB 95. If the lead phase-out goes as planned, it will constitute two phases: reduction from 0,6 mg/l to 0,13 and then to 0,005ml/l by 2012. Though by industry standards, Serbia may be completely unleaded before 2012.</p>
Slovakia	Unleaded	Ban since 1995.	10	10	Follows EU Fuel and Vehicle Directives
Slovenia	Unleaded	Ban since 2001.	10	10	Follows EU Fuel and Vehicle Directives
Tajikistan	Unleaded	Fully unleaded 2010	2,000	1,000	Follows GOST

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					standards.
The former Yugoslav Republic of Macedonia	Unleaded	Leaded petrol import and production banned in July 2009	10	10	5% bio diesel allowed in diesel Д-Е III grade. OKTA Macedonia produces 'Euro 4' grade diesel and unleaded petrol.
Turkey	Unleaded	Ban since 2006. Phase-out began in 2002.	1000	10	Effective January 1, 2008, new limits were introduced for sulfur in diesel fuels. Petrol Ofisi sells V/MAX Eurodiesel at 10ppm, along with Tupras. Although the Regulation on Petrol and Diesel Quality (OJ:25489) defines the maximum allowable sulfur level for diesel fuel as 10 ppm; high sulfur level diesel is still available on the market with a significant share of 70%. On the domestic market there are two grades of diesel fuel available: 1-Low sulfur diesel (Sulfur content LESS than 10 ppm) 2-Rural diesel (Sulfur content between 10-1000 ppm)
Turkmenistan	Unleaded	Ban since 2003	2,000	1,000	Follows GOST standards.
Ukraine	Unleaded	Ban since 01/01/2003.	2,000	150	'Euro 3' petrol planned for 2011.

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Uzbekistan	Unleaded	Full unleaded 2010.	5,000	1,000	

*Please note that some of this information, especially for countries in the Former Soviet Union, are based on the most readily available information on existing conditions and are thus subject to correction or change. Email elisa.dumitrescu@unep.org with updates.

** Russian Gosudarstvennyye Standarty State Standard

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