

LATIN AMERICA AND THE CARIBBEAN SULPHUR LEVELS IN DIESEL FUEL

Country	Diesel Sulphur Level (ppm), max allowable	Petrol Sulphur Level (ppm)	Comments	Reference
Anguilla				
Antigua and Barbuda			Imports petroleum products and oil.	
Argentina	2500	500	Multiple grades available on market depending on population density zone; 500 ppm diesel, 300 ppm petrol also available. 2012 target of 50 ppm city/1500 ppm national diesel and 50/300 ppm petrol to coincide with Euro IV standards for diesel passenger vehicles. 9 refineries – no plans to invest in upgrades.	Resolution 1283/2006, Secretary of Energy
Aruba			One refinery – Lago, heavy sour crude oil.	
Bahamas			Imports oil for domestic processing of petrol.	
Barbados	5000	1000	Imports fuel from Trinidad which refines Barbados' oil. Barbados National Oil Co. Ltd. produces crude oil. Mobil Oil Barbados Ltd. refines oil.	
Belize			Imports crude oil and petrol from US, Venezuela, Mexico and Cuba.	
Bermuda			Petrol is imported from US, Canada, Italy and UK.	
Bolivia	5000	500	2 refineries; 2000 ppm diesel also available on market	ARPEL 2007; EIA

Brazil	2000	1000	<p>Diesel: 500 ppm also available. 1800ppm planned for 2010, 500ppm planned for 2014 nationwide. USD 6 billion refinery upgrade planned, 13 refineries (2 private, 11 state owned Petrobras). Petrobras plans to produce 50 ppm diesel from 2009 - 2012, and 10 ppm diesel from 2013 for urban areas. 55% of all fuel is ethanol. All new Brazilian cars are equipped with "flex-fuel" engines. 15 billion gallons, or 10% of all fuel sold by 2015. Total use of biofuels could grow to 20% by 2022.</p>	<p>CONAMA Resolution 315, of 2002</p> <p>Judicial Agreement Nov 2008</p> <p>Coalition for Clean Air, Brasil</p> <p>latimes.com/business/la-fi-biofuels4-2009nov04,0,2435171.story</p> <p>Chris Kraul</p>
Cayman Islands (BVI)	5000		<p>Esso and Chevron only licensed companies. Caribbean Utilities Company CUC is the largest buyer thus dictates the grade of diesel fuel at the pumps currently between 1000 to 5000ppm</p>	
Chile	50	30	<p>From January 1, 2010 began distributing 50 ppm diesel across the country; Gasoline is expected to fall to 15 ppm sulfur in the metropolitan area in the coming months and diesel down to 15 ppm in early 2011; Santiago region 50 ppm from July 2004, plan to go to 15ppm in 2011. USD 1 billion investment</p>	<p>CONAMA Chile, ARPEL 2007</p> <p>Centro Mario Molina Chile, national survey 2009</p> <p>Marcelo Fernández G. Control de Contaminación Atmosférica - Jan 2010</p>

			planned in upgrades; 2 state owned refineries ENAP	
Colombia	2500	900	Diesel: 2500 ppm nationwide to go to 500ppm from Jan 2010, and 50ppm from Jan 2013. Bogota 500 ppm, 50 ppm from January 2010. Petrol: sold with 10% ethanol. USD 1 billion investment planned for refineries 5 state refineries	National University of Colombia; ARPEL 2007 Centro Mario Molina Chile, - national survey 2009
Costa Rica	500	1000	Imports crude oil from Mexico and Venezuela.	
Cuba	8000	1200	Has some oil reserves and produces petrol. Dependant on oil imports from neighboring countries and Venezuela.	
Dominica			Imports its fuel.	
Dominican Republic	7500	1500	Net importer of petrol, 75% comes from Venezuela, rest from Colombia and Mexico. 2 Refineries on the island. Proposal for 50ppm limit *	* Battelle – USEPA 2009
Ecuador	500/7000	2000	500 ppm fuel available in Quito and Cuenca. Plans for national reduction to 500 ppm in 2009. USD 1 billion investment required to reach 50 ppm diesel and petrol. 3 refineries. Member of OPEC	ARPEL 2007
El Salvador	5000	1000	Imports its petroleum products from Ecuador, Chile, the US, and the Caribbean. Plan to decrease sulphur to 500 ppm by 2010. Petrol vehicles should be	

			equipped with catalytic converters.	
French Guiana			No refineries	
Grenada			Imports petrol from Venezuela.	
Guatemala	5000	1000	Has oil reserves and produces fuel. Plan to have maximum 500 ppm diesel and petrol by 2010.	
Guyana			No refineries	
Haiti			Refined petroleum products are imported. Exxon, Royal Dutch Shell, and Texaco operate petrol stations in Haiti.	
Honduras	5000	1000	Imports its fuel. Plan to decrease fuel sulphur to 500 ppm by 2010.	
Jamaica	5000	1500	Imports part of its fuel. Petrojam refinery produces diesel oil, unleaded petrol and some bioethanol.	Jamaica aims to require 2% biodiesel additive.
Mexico	250	1000	250 ppm diesel and 500 ppm petrol in cities. Petrol levels to 30 ppm average/80 ppm in 2010 for all country; diesel at 15 ppm in cities by end of 2009. Six refineries. PEMEX monopoly. Non-OPEC	SEMARNAT, PEMEX
Montserrat				
Nicaragua	5000	1000	Net importer of fuel from Venezuela. One refinery. Plan to have maximum 500ppm fuel by 2010.	ARPEL 2005
Panama	5000*	1000	Almost all fuel is imported. Plan to decrease sulphur content to 1000 ppm in diesel by Jan 2010 and 500ppm gasoline by Oct	* Also has Diesel Liviano Grado 2D (500) with max sulfur of 500ppm - Battelle – USEPA 2009

			2009.	
Paraguay	5000	1000	No refineries PDVSA major provider of fuels. 78% of vehicles are diesel and 22% gasoline or flex	ARPEL 2007 PCFV national survey 2009
Peru	5000	2000	Government decree of July 2005 provides for reduction to 50 ppm metropolitan, 1500 nationwide diesel as of 2010 – still to be confirmed. Lima and Callao only 50ppm from March 1 st 2010. 7 refineries, USD 1 billion required for upgrades. USD \$330 million loan from World Bank to assist	USEPA Daily Environment Report 'Peru Cracks Down on 'Dirty' Diesel Fuel, Sets Deadline for Cutting Sulfur Content' Centro Mario Molina Chile, - national survey 2009 International Fuel Quality Center ifqc@ifqc.org
Puerto Rico	15	15	US current fuel standards used.	
St Kitts and Nevis			Net importer of fuel (mainly diesel).	
Saint Lucia			Imports all its fuel. Plans to construct a refinery.	
St Vincent and the Grenadines			Net importer of fuel from US and Venezuela.	
Suriname	5000	300	Net importer of fuel.	ARPEL 2005
Trinidad and Tobago	1500	500	Own reserves of oil, produces diesel and petrol. Petrotrin plans 3 year investments to launch low sulphur fuel production.	ARPEL 2005
Turks and Caicos Islands				
Uruguay	8000	1000	50 ppm diesel, 300 ppm petrol planned for 2010 nationally, 1 refinery	ARPEL 2007
Venezuela	5000	1500	2000 ppm diesel, 400 ppm petrol planned for 2010, 5 refineries. Member of OPEC Only 20% of oil	ARPEL 2007 APS Review Downstream Trends 2009

			production is light, announced in September 2009 that it would invest \$17bn to improve facilities to refine its large reserves of ultra-heavy oil.	
Virgin Islands	15	15	15 ppm USA diesel rule 500 ppm non-road sulphur limit are applied.	
Total: 42 countries				

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Last updated Feb 2010



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