

## 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; 500 ppm diesel, 300 ppm petrol also available. 2009 target of 50 ppm city/1500 ppm national diesel and 50/300 ppm petrol to coincide with Euro IV standards for diesel passenger vehicles. 10 refineries	Resolution 1283/2006, Secretary of Energy
Aruba			One refinery – Lago.	
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	500 ppm diesel also available on market. USD 5.5 billion refinery upgrade planned, 13 refineries. Petrobras	CONAMA Resolution 315, of 2002

			plans to produce 50 ppm diesel from 2009 to 2012, and 10 ppm diesel from 2013.	
Cayman Islands (BVI)				
Chile	350	75	50 ppm diesel available on market; 2010 plans for 50 ppm nationally diesel and petrol; Santiago region already at 50 ppm. USD 1 billion investment planned in upgrades; 3 refineries	CONAMA Chile, ARPEL 2007
Colombia	4500	1000	Current urban grade of diesel is 1200 ppm. Legislation for Bogota mandates 500 ppm S level in diesel, 300 ppm from 1 July 2008, 50 ppm from December 2009. The plan for the rest of the country is: 3000 ppm from July 2008, 2500 ppm from July 2009, 500 ppm from January 2010, 50 ppm from 2012. USD 1 billion investment planned; 5 refineries	National University of Colombia; ARPEL 2007
Costa Rica	500	1000	Imports crude oil from Mexico and Venezuela. 'Euro 1' fuel grade adopted in 2008.	
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.	
Ecuador	500/7000	2000	500 ppm fuel available in Quito and Cuenca.	ARPEL 2007

			Plans for national reduction to 500 ppm in 2009. USD 1 billion investment required to reach 50 ppm diesel and petrol. 3 refineries	
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			Does not produce any fuel, 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	500	1000	300 ppm diesel and 500 ppm petrol available in cities. Petrol levels to reduce to 30 ppm average/80 ppm in January 2009 for all country; diesel at 15	SEMARNAT, PEMEX

			ppm in January 2009 for urban, September 2009 for rest of country.	
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 500ppm by 2010.	
Paraguay	5000	1000	1 refinery	ARPEL 2007
Peru	3000/5000	1000	Government decree of July 2005 provides for reduction to 50 ppm metropolitan, 1500 nationwide diesel as of 2010. 6 refineries, USD 1 billion required for upgrades	USEPA Daily Environment Report 'Peru Cracks Down on 'Dirty' Diesel Fuel, Sets Deadline for Cutting Sulfur Content'
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. Hess 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	ARPEL 2007

			ppm petrol planned for 2010, 5 refineries	
Virgin Islands	15	15	15 ppm USA diesel rule 500 ppm non-road sulphur limit are applied.	
<b>Total: 42 countries</b>				

**References:**

Alexander's Gas and Oil Connection. Five firms eyeing Costa Rica refinery revamp project.  
<http://www.gasandoil.com/goc/news/ntl72640.htm>

ARPEL February 2007 presentation by José Félix García, <http://www.unep.org/pcfv/PDF/FundamentalsFuels-ING.pdf>

ARPEL July 26, 2005 Personal Correspondence

Background Data Collection on Bio-Energy in the Caribbean and Central America, Energy Security group, December 2006  
 Warren M., CAMACOL – 2008, Toyota Motor North America

Energy Information Administration (US), <http://www.eia.doe.gov/emeu/cabs/contents.html>

George A. Rabchevsky, The mineral industry of other Caribbeans.

Michael Walsh, International Consultant, Global Clean Fuels Overview, June 26, 2005

SEMARNAT, PEMEX Announcement of Low Sulphur Diesel, December 2005  
[http://portal.semarnat.gob.mx/comunicacionsocial/boletines\\_2005\\_275.shtml](http://portal.semarnat.gob.mx/comunicacionsocial/boletines_2005_275.shtml)