## **Air Quality Policies**

This document is based on research that UNEP conducted in 2015, in response to Resolution 7 of the UNEA 1. It describes countrylevel policies that impact air quality. Triple question marks (???) indicate that information for the section couldn't be found.

Please review the information, and provide feedback. A Word version of the template can be provided upon request. Corrections and comments can be emailed to <u>Vered.Ehsani@unep.org</u> and <u>George.Mwaniki@unep.org</u>.

ECUADOR		
GOALS	CURRENT STATUS	CURRENT / PLANNED POLICIES & PROGRAMMES
GENERAL OVERVIEW	<ul> <li>Overall situation with respect to air quality in the country, including key air quality challenges: Air pollution is a growing problem in urban areas, where approximately 85% of pollution comes from transport, with the remaining from industry and thermal power plants</li> <li>Air quality monitoring system: Yes, in some cities</li> <li>A National Plan for Air Quality was adopted in 2010, with a very ambitious 6-year plan; no mid-plan assessment could be found to</li> </ul>	<ul> <li>National Ambient air quality standards: PM2.5, PM10 and O3 meet WHO Interim Targets; SO2 and NO2 do not meet targets</li> <li>National Air Quality Policy: ???</li> <li>Air Quality legislation / programmes: National Plan for Air Quality has several projects, including emission inventory, a national monitoring system, reduction and control of emissions from power generation, production of better quality fuels, revision of vehicle standards and more, and results will be evaluated using average annual levels of PM10, PM2.5, SO2 and NO2 (http://www.ambiente.gob.ec/wp-content/uploads/downloads/2012/10/libro-calidad-aire-1-final.pdf)</li> <li>Other: Air emissions are regulated both by national and regional (municipalities) standards. The more stringent applies. Congress is processing a new "Environmental Code" the main purpose of which is to consolidate the numerous legal and regulatory frameworks dealing with</li> </ul>
REDUCE EMISSIONS FROM	<ul> <li>indicate if the proposed projects were being implemented (??? - verify)</li> <li>Industries that have the potential to impact air quality: petroleum, chemicals, wood products, textiles</li> </ul>	<ul> <li>environmental issues and, in some cases, raise current regulatory norms to law.</li> <li>Emission regulations for industries: No separate permits given for emissions; permits for construction / operation depend on environmental licenses which will be issued when the EIA is approved</li> </ul>
Industries	• GDP of country: \$100 billion	• Small installation's emissions regulated: (Yes/No) ???
	• Industries' share of GDP: 36%	
	• Electricity sources: thermal (52%), hydro (42%), biomass (1%), 4% imported	• <b>Renewable energy investment promoted</b> : Renewable energy target of 90% by 2017, 277MW other than hydro by 2022. Exemptions from income tax and customs duty; funding; rural renewable energy program
		• Energy efficiency incentives: Energy Efficiency National Plan and Energy Efficiency

		Promotion Law; various programs such as Public Building Energy Efficiency Program; mandatory energy efficiency technical regulations for various appliances
		• Incentives for clean production and installation of pollution prevention technologies: ???
		• Actions to ensure compliance with regulations: Strict liability principle applies in environmental pollution cases. Monetary fines, suspension or cancellation of the environmental licence (if any), and temporary or definitive closing of the industry or business are used. In the case of criminal penalties, imprisonment is the principal penalty. In environmental pollution cases, reversion of burden of proof applies; there is no statute of limitation for environmental actions against polluters
		• Other actions at national, sub-national and / or local level to reduce industry emissions: ???
REDUCE	• Key transport-related air quality	• Vehicle emission limit: Euro 1 (Euro 2 for heavy duty diesel vehicles)
EMISSIONS	challenges: Rapid growth of private vehicle	• Fuel Sulphur content: 5,000 ppm, with 250ppm available in Quito and Cuenca
FROM TRANSPORT	fleet, poor emission standards, high levels of Sulphur in fuel	• Restriction on used car importation: Banned
		• Actions to expand, improve and promote public transport and mass transit: Guayaquil has retired 500 of the city's oldest, most polluting buses and introduced the Metrovia bus rapid transit system, for which it received ITDP's annual Sustainable Transport Award
		• Actions to promote non-motorized transport: (ex: include sidewalks and bike lanes in new road projects, car-free areas etc) ???
		• Other transport-related actions: ???
REDUCE	• Outdoor, open burning: cases of petroleum	• Legal framework: (ex: is burning banned?) ???
EMISSIONS FROM OPEN BURNING OF AGRICULTURAL / MUNICIPAL WASTE (OUTDOOR)	companies flaring gas and burning waste pits, releasing toxins into the environment, particularly the Amazonian region; open burning of agricultural waste occurs	• Actions to prevent open burning of municipal waste and / or agricultural waste: ???
REDUCE EMISSIONS	• Dominant fuels used for cooking and space heating: <5% use solid fuels	• Indoor air pollution regulated: No
FROM OPEN BURNING OF	• <b>Impact</b> : <100 deaths/year from indoor air pollution (500 from outdoor air pollution)	• Promotion of non-grid / grid electrification: 95% electrification rate in urban areas, 89% in

BIOMASS	rural areas
(INDOOR)	• Promotion of cleaner cooking fuels and clean cook stoves: ???
	• Other actions to reduce indoor biomass burning, or to reduce its emissions: ???

Secondary Sources used in the research: http://www.cleanairinstitute.org/calidaddelaireamericalatina/cai-report-english.pdf, http://www.unep.org/Transport/new/PCFV/pdf/Maps\_Matrices/LAC/matrix/LAC\_FuelsVeh\_June2015.pdf, http://latinlawyer.com/, http://www.irena.org/DocumentDownloads/Publications/IRENA\_RE\_Latin\_America\_Policies\_2015.pdf, http://airlex.web.ua.pt/pm10, http://www.who.int/quantifying\_ehimpacts/national/countryprofile/en/#I, http://www.nrdc.org/international/files/latin-america-diesel-pollution-IB.pdf, http://www.reegle.info/countries/ecuador-energy-profile/EC, http://www.tuv-sud.com/home-com/resource-centre/publications/e-ssentialsnewsletter/consumer-products-e-ssentials/vol.-81/ecuador-mandatory-energy-efficiency-technical-regulations-for-combined-washer-dryer-electricstorage-water-heater-and-microwave-ove, http://www.worldwatch.org/node/4872, http://www.ambiente.gob.ec/wpcontent/uploads/downloads/2012/10/libro-calidad-aire-1-final.pdf, http://latinlawyer.com/reference/topics/51/jurisdictions/32/ecuador/, http://www.slideshare.net/mateoca3/calidad-del-aire-cuenca-ecuador-en-relacion-con-el-crecimiento-del-parque-automotor, http://chevrontoxico.com/about/environmental-impacts/



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