

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 country-level 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 Vered.Ehsani@unep.org and George.Mwaniki@unep.org.

PANAMA		
GOALS	CURRENT STATUS	CURRENT / PLANNED POLICIES & PROGRAMMES
GENERAL OVERVIEW	<ul style="list-style-type: none"> ● Overall situation with respect to air quality in the country, including key air quality challenges: air pollution is increasing in urban areas, mainly from transportation ● Air quality monitoring system: Yes 	<ul style="list-style-type: none"> ● National Ambient air quality standards: PM10 and Ozone meet WHO Interim Targets; SO2 and NO2 do not meet; No PM2.5 standard ● National Air Quality Policy: ??? ● Air Quality legislation / programmes: ??? ● Other:
REDUCE EMISSIONS FROM INDUSTRIES	<ul style="list-style-type: none"> ● Industries that have the potential to impact air quality: cement, construction, sugar, some manufacturing ● GDP of country: \$44 billion ● Industries' share of GDP: 17% ● Electricity sources: Hydro (49% installed capacity); Thermal (51% installed capacity) ● Transmission network weak in terms of capacity to deliver 	<ul style="list-style-type: none"> ● Emission regulations for industries: Decreto Ejecutivo No 5 describes maximum emission limits from fixed sources, based on World Bank's 1998 guidelines ● Small installation's emissions regulated: (Yes/No) ??? ● Renewable energy investment promoted: national renewable energy target of 706MW hydro by 2023; wind farms and photovoltaic plants in operation / being built; total number of wind and solar licenses being processed is equivalent to more than twice current energy demand in country; proposed law to promote mini-hydro projects; proposal to build a waste-to-energy plant for solid waste treatment and power generation; incentives for renewable energy projects such as exemption from VAT, fuel tax, income tax and import taxes; fiscal incentives up to 25% of direct investment etc ● Energy efficiency incentives: (ex: Subsidies, labelling, rebates etc) ??? ● Incentives for clean production and installation of pollution prevention technologies: ??? ● Actions to ensure compliance with regulations: (monitoring, enforcement, fines etc) ??? ● Other actions at national, sub-national and / or local level to reduce industry emissions: Expansion project of thermoelectric plant includes replacing bunker fuel with natural gas

<p>REDUCE EMISSIONS FROM TRANSPORT</p>	<ul style="list-style-type: none"> ● Key transport-related air quality challenges: high levels of congestion from vehicles, no vehicle emission limits ● Highest per-capita car ownership in Central America ● Panama City has Central America’s first metro subway system – currently one line with 12 stations 	<ul style="list-style-type: none"> ● Vehicle emission limit: None ● Fuel Sulphur content: 15 ppm ● Restriction on used car importation: No import restrictions, although cars older than 12 months occur an additional fee of \$750; older than 36 months - \$1,500 ● Actions to expand, improve and promote public transport and mass transit: plans to construct more Metro lines ● Actions to promote non-motorized transport: (ex: include sidewalks and bike lanes in new road projects, car-free areas etc) ??? ● Other transport-related actions: until end of 2012, there was no import tax applied to electric or hybrid cars; now there is a 5% tax, which is much lower than for other cars (18 – 25%); Cinta Costera is a coastal thruway that goes around the edge of Panama City to relieve city congestion
<p>REDUCE EMISSIONS FROM OPEN BURNING OF AGRICULTURAL / MUNICIPAL WASTE (OUTDOOR)</p>	<ul style="list-style-type: none"> ● Outdoor, open burning: inadequate waste collection service outside of main urban areas leads to open waste burning or illegal dumping 	<ul style="list-style-type: none"> ● Legal framework: government agency is mandated to collect municipal waste, but can only manage within the 3 main urban areas ● Actions to prevent open burning of municipal waste and / or agricultural waste: ???
<p>REDUCE EMISSIONS FROM OPEN BURNING OF BIOMASS (INDOOR)</p>	<ul style="list-style-type: none"> ● Dominant fuels used for cooking and space heating: 33% use solid fuels ● Impact: 200 deaths/year from indoor air pollution (200 from outdoor air pollution) 	<ul style="list-style-type: none"> ● Indoor air pollution regulated: No ● Promotion of non-grid / grid electrification: 88% coverage, but outside of the capital, reliability is an issue; programme to promote renewable energy in rural areas ● 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.encyclopedia.com/topic/Panama.aspx>, <http://www.govtech.com/fs/news/Panama-Citys-Sustainable-and-Resilient-Infrastructure-Development.html>, <http://laestrella.com.pa/panama/nacional/acelerado-crecimiento-vehicular-contaminacion-ciudad/23801888>, http://www.ficem.org/normas/Panama/decreto_5.pdf, https://en.wikipedia.org/wiki/Economy_of_Panama, http://www.centralamericadata.com/en/search?q1=content_en_le%3A%22solar+energy%22&q2=mattersInCountry_en_le%3A%22Panama%22, http://www.irena.org/DocumentDownloads/Publications/IRENA_RE_Latin_America_Policies_2015.pdf, http://www.centralamericadata.com/en/article/home/Panama_Thermoelectric_Station_Changes_Over_to_Gas,

http://www.centralamericadata.com/en/article/home/Panama_80_million_Biomass_Plant, <http://www.icrepq.com/icrepq'11/337-giardinella.pdf>,
http://www.centralamericadata.com/en/article/home/Panama_12_MW_Solar_Plant_Starts_Operating, <http://www.expatsfocus.com/expatriate-panama-vehicle-import>, <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