

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.

DOMINICAN REPUBLIC		
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: <ul style="list-style-type: none"> ● The Dominican Republic has become an urban nation over the last 30 years, as 2/3 of its population reside in the city. During this same period, industrialization within the cities has occurred and horrible control has led to increased air pollution¹. ● Major sources of air pollution in the Dominican Republic include motor vehicles, thermal power plants, and other industrial sources. ● Haina, also known as Bajos de Haina, has been referred to as the 'Dominican Chernobyl'. It's located near an abandoned lead-acid battery recycling smelter, and nearly its entire population shows signs of lead poisoning. In 2000, the Dominican Secretary of Environment and Natural Resources identified Haina as a national hotspot of significant concern². One of 	<ul style="list-style-type: none"> ● National Ambient air quality standards: (<i>Exist</i>) does not meet the recommended Ambient Air Quality Standards and WHO interim targets⁵. ● National Air Quality Policy: <ul style="list-style-type: none"> ● In the Dominican Republic the institutional and legal framework for environmental policy is the General Law on the Environment and Natural Resources (Law 64-00), enacted in August 2000.⁶ ● Air Quality legislation / programmes: <ul style="list-style-type: none"> ● Environmental management standard for non-hazardous solid waste. ● Environmental management standard for radioactive waste. ● Environmental standards for air quality and emissions control. ● Standards for reduction and elimination of the consumption of substances that deplete the ozone layer. ● Formal Environmental education ● ● Other: ??? <ul style="list-style-type: none"> ● Dominican Republic has its low emissions development strategy called Climate Compatible Development Plan (CCDP), focused mainly on 3 key areas: energy, transport and

¹ Air Pollution in Dominican Republic; <http://www.markedbyteachers.com/as-and-a-level/sociology/air-pollution-in-dominican-republic.html>

² Blacksmith Institute; <http://www.blacksmithinstitute.org/haina.html>

⁵ Airlex Worldwide Air Quality Legislation; <http://airlex.web.ua.pt/so2>

⁶ Dominican Republic Encyclopedic Dictionary of the Environment; http://www.diccionariomedioambiente.org/diccionariomedioambiente_en/en/definicionVer.asp?id=650

	<p>the exposure pathways is through inhaling dust contaminated with lead (especially during dry months when airborne dust pollution affects large areas).</p> <ul style="list-style-type: none"> ● National statistics show that air pollution is responsible for a high value of respiratory conditions as well as for high levels of infant morbidity and mortality³. ● Air quality monitoring system: As part of a new Air Quality and Meteorology Network in the Dominican Republic, Pueblo Viejo Dominicana Corporation (PVDC) has implemented three automated air quality data monitoring stations with a fourth to be added pending site location approval⁴. 	<p>forestry sectors and a group called "quick wins" which forms the sectors: cement, waste and tourism⁷.</p>
<p>REDUCE EMISSIONS FROM INDUSTRIES</p>	<ul style="list-style-type: none"> ● Industries that have the potential to impact air quality: <ul style="list-style-type: none"> ● Industries that have the potential to impact air quality in Dominica Republic are energy sector, industrial sector and agricultural sector. ● GDP of country: \$9,911 per capita (2013 estimate)⁸ ● Industries' share of GDP: 29.1% (2013 estimate)⁹ 	<ul style="list-style-type: none"> ● Emission regulations for industries: <ul style="list-style-type: none"> ● Emission standards for air pollutants from fuel combustion and industrial processes are set in Environmental Standards on Air Quality and Air Emissions Control¹¹. ● Small installation's emissions regulated: (Yes/No) ??? ● Renewable energy investment promoted: <ul style="list-style-type: none"> ● In 2011, the government implemented a net metering provision that allows customers to take advantage of solar photovoltaic (PV) technology to help reduce their electricity bills¹². ● Dominican Republic passed a very strong law to incentivize the growth of renewable energy: <ul style="list-style-type: none"> ● the law waives import duties for renewable energy equipment, ● allows for the writing off of 75 percent of sales tax on electricity sales from renewable sources for 10 years, and ● makes the tax on equipment deductible up to 75 percent for that same period¹³.

³ Environmental law; <http://laleyenverde.com/en/contaminacion-del-aire-en-republica-dominicana/#.VjsbucKig>

⁴ Air Quality and Meteorology Network in the Dominican Republic: <http://www.earthsoft.com/wp-content/uploads/2011/08/Air-Quality-and-Meteorology-Network-in-the-Dominican-Republic.pdf>

⁷ Climate and Clean Air Coalition: <http://www.unep.org/ccac/tabid/131829/Default.aspx>

⁸ Index Mundi; http://www.indexmundi.com/dominican_republic/gdp_composition_by_sector.html

⁹ Index Mundi; http://www.indexmundi.com/dominican_republic/gdp_composition_by_sector.html

	<ul style="list-style-type: none"> ● Electricity sources: <ul style="list-style-type: none"> ● Electricity sector is dominated by fossil fuels, with oil (46.0%), natural gas (24.9%), and coal (14.2%) accounting for 85% of the country's power generation in 2014¹⁰. ● Renewable energy now accounted for 15% of electricity generation in the country, with hydropower (13.2%) and wind (1.7%) accounting for nearly all renewable generation. 	<ul style="list-style-type: none"> ● Energy efficiency incentives: (ex: Subsidies, labelling, rebates etc.) ??? ● Incentives for clean production and installation of pollution prevention technologies: <ul style="list-style-type: none"> ● Under the Renewable Energy Development Act (Law 57-07), tax exemptions are available for equipment and accessories related to the installation of biodigesters¹⁴. ● Actions to ensure compliance with regulations : (monitoring, enforcement, fines etc.) ??? ● Other actions at national, sub-national and / or local level to reduce industry emissions¹⁵: <ul style="list-style-type: none"> ● The Dominican Republic government and UNDP as the lead of implementation agency are carrying out the HCFC phase-out management plan (stage I) enabling the country to comply with the Montreal Protocol's 10 per cent reduction in HCFC consumption by 2015. ● In relation to methane reduction, the Dominican Republic is designing and will implement its CCDP on the “quick wins” sector through Nationally Appropriate Mitigation Actions (NAMAs).
REDUCE EMISSIONS FROM TRANSPORT	<ul style="list-style-type: none"> ● Key transport-related air quality challenges: (ex: vehicle growth, old fleet, dirty fuel, poor public transport etc.) <ul style="list-style-type: none"> ● Growth in private vehicle ownership is increasing 7% yearly and it was estimated that there will be over 2.2 million privately owned cars in the nation by 2010. This is a serious concern because motor vehicle exhaust is the source of 85% to 95% carbon monoxide in urban areas¹⁶. ● With the large population movement to the city, vehicle use and ownership has 	<ul style="list-style-type: none"> ● Vehicle emission limit: (Euro rating)??? ● Fuel Sulphur content: (in ppm) 7500 ppm for Diesel; 1500ppm for Gasoline. Preliminary work has been done on a proposal for 50ppm limit in diesel and gasoline. ● Restriction on used car importation: <ul style="list-style-type: none"> ● The import of automobiles and light trucks (under five tons) over five years old is prohibited under law no. 147 of December 27, 2000¹⁷. This provision is, however, often overlooked. ● The import of vehicles five tons or heavier, over 15 years old, is prohibited under lawno.

¹¹ <http://www.iea-coal.org.uk/documents/82596/7934/Dominica>

¹² World Watch Institute; <http://blogs.worldwatch.org/revolt/opportunity-knocks-in-dr/>

¹³ World Watch Institute; <http://blogs.worldwatch.org/revolt/opportunity-knocks-in-dr/>

¹⁰ Harnessing the Dominican Republic's Sustainable Energy Resources: http://www.worldwatch.org/system/files/DR_report_English_hi-res.pdf

¹⁴ A Global Perspective of Anaerobic Digestion Policies and Incentives, November 2014: <https://www.globalmethane.org/documents/tools/A-Global-Perspective-of-AD-Policies-Incentives.pdf>

¹⁵ Climate and Clean Air Coalition: <http://www.unep.org/ccac/tabid/131829/Default.aspx>

¹⁶ Marked by Teachers; <http://www.markedbyteachers.com/as-and-a-level/sociology/air-pollution-in-dominican-republic.html>

¹⁷ Compilation of Foreign Motor Vehicle Import Requirements: http://trade.gov/static/autos_report_tradebarriers2011.pdf

	<p>increased thus leading to increase in air pollution.</p>	<p>12-01 of January 17, 2001.</p> <ul style="list-style-type: none"> ● Engines must be < 2000cc and maximum of 6 cylinders; otherwise subject to high 'luxury' car tax. No I/M program exists. <p>● Actions to expand, improve and promote public transport and mass transit:</p> <ul style="list-style-type: none"> ● Santa Domingo metro is a rapid transit system that serves the population of Santa Domingo, which is the capital city of Dominican Republic. The system began operations on 22 December 2008 as a non-commercial system. The system began commercial system service on 30th January, 2009. The network presently has two lines that serves 30 stations and has a total track length of 27.4 kilometres. As per 2013 statistics, the system has a daily average ridership of 138, 700 passengers and annual ridership of 30,856,515 passengers as in 2012. The metro is operated by OPRET¹⁸. <p>● Actions to promote non-motorized transport: (ex: include sidewalks and bike lanes in new road projects, car-free areas etc.)</p> <ul style="list-style-type: none"> ● The Santo Domingo City Council (ADN) has initiated Dominican Republic's first ever bike lanes, expected to ease the traffic chaos in the capital of more than three million. AND Secretary Sina del Rosario made the announcement to launch the awareness campaign "grand family bike ride" to promote the bicycle as a means of transport in Santo Domingo. The eight kilometres of bicycle lanes will wind through Churchill Av. and link the campuses of four major universities: INTEC, UNPHU, O & M and PUCMM, two subway stations, three parks, four large malls, six major banks and the area of government office buildings at La Feria¹⁹. <p>● Other transport-related actions: ???</p> <ul style="list-style-type: none"> ● As part of a national measure, the Dominican Republic has introduced the carbon tax for the transport sector regarding their CO2 emissions²⁰.
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¹⁸ Santa Domingo Metro; <http://metroeasy.metromates.com/santo-domingo-metro.html>

¹⁹ Dominican Today; <http://www.dominicantoday.com/dr/economy/2015/1/20/53980/Dominican-capital-announces-first-ever-bike-lanes>

²⁰ Climate and Clean Air Coalition: <http://www.unep.org/ccac/tabid/131829/Default.aspx>

<p>REDUCE EMISSIONS FROM OPEN BURNING OF AGRICULTURAL / MUNICIPAL WASTE (OUTDOOR)</p>	<ul style="list-style-type: none"> ● Outdoor, open burning: (ex: is it commonly done? burning what kinds of wastes? etc.) ??? 	<ul style="list-style-type: none"> ● Legal framework: (ex: is burning banned?) ??? ● 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: 15% of households use solid fuels²¹. A further breakdown on dominant fuels used for cooking and space heating by % of households²²: <ul style="list-style-type: none"> ● Wood for cooking 6.8% ● Charcoal for cooking 2.8% ● Gas for cooking 88.2% ● Electricity for cooking 0.1% ● Oher fuels for cooking 2.1% ● Impact: 300 deaths per year for indoor air pollution; and 800 per year for outdoor air pollution²³ 	<ul style="list-style-type: none"> ● Indoor air pollution regulated: (Yes / No) ??? ● Promotion of non-grid / grid electrification: ??? <ul style="list-style-type: none"> ● The primary objectives of the Dominican Republic Power Expansion Plan are to correct the power generation deficit by adding additional installed capacity and increasing the distribution efficiency by up-g transmission lines and substations. ● An average demand growth of 5.1 percent per year, and retirement of the older, less efficient power plants now is in operation. New plant requirements by the year 2010 are nine new plants with a total capacity of 1,250 MW by the year 2010. The two new proposed 125 MW plants are included in this total. ● Promotion of cleaner cooking fuels and clean cook stoves: <ul style="list-style-type: none"> ● The Dominican Republic is developing a high efficiency stoves project in the border area between Haiti and the Dominican Republic in order to avoid deforestation and increase forest cover in that region, reducing emissions from deforestation, and also increase the standard of living of the rural border population through a cleaner air and a reduction of the collection time of firewood by women²⁴. ● Peace Corps are helping communities in Dominican Republic to build improved cookstoves in order to reduce the need for fuel, boost income, decrease deforestation and improve health and air quality²⁵. ● Other actions to reduce indoor biomass burning, or to reduce its emissions: ???

²¹ World Health Organization; Country profile of Environmental Burden of Disease

²² Global Alliance for Clean Cook Stoves; <http://cleancookstoves.org/country-profiles/98-dominican-republic.html>

²³ World Health Organization; Country profile of Environmental Burden of Disease

²⁴ Climate and Clean Air Coalition; <http://www.unep.org/ccac/tabid/131829/Default.aspx>

²⁵ IPP Digital; <http://iipdigital.usembassy.gov/st/english/article/2014/06/20140606300916.html#axzz3r4eauYI0>

Secondary Sources used in the research: