## **Sierra Leone 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 <a href="mailto:Vered.Ehsani@unep.org">Vered.Ehsani@unep.org</a> and <a href="mailto:George.Mwaniki@unep.org">George.Mwaniki@unep.org</a>.

Sierra Leone	Sierra Leone Air Quality Policy Matrix			
Goals	Status	Current Policies & Programmes		
GENERAL	Overall situation with respect to air	National Ambient air quality standards:		
OVERVIEW	quality in the country, including key air	National Air Quality Policy: ???		
	quality challenges: ???	Air Quality legislation / programmes: ???		
	Air quality monitoring system: ???	Other: ???		
REDUCE EMISSIONS FROM	Industries that have the potential to	Emission regulations for industries:		
	impact air quality:	• Some emissions are regulated under the environment protection act of 2000		
INDUSTRIES	• The most important industries are; diamond mining; iron ore, rutile and bauxite mining; small-scale manufacturing (beverages, textiles, cigarettes, footwear); petroleum refining, small commercial ship repair among others	• Individual operating permits may have provisions regarding air emissions or effluents.		
		Small installation's emissions regulated: (Yes/No) ???		
		Renewable energy investment promoted: ???		
		Energy efficiency incentives: (ex: Subsidies, labelling, rebates etc) ???		
		Incentives for clean production and installation of pollution prevention technologies: ???		
	<b>GDP of country</b> : USD 9.2B in 2013 <sup>1</sup>	Actions to ensure compliance with regulations: (monitoring, enforcement, fines etc) ???		
	Industries' share of GDP: 18.6%	• Other actions at national, sub-national and / or local level to reduce industry: (can include		
	Electricity sources:	incentives to move industries to less populated areas here) ???		
	• 47.1% of the installed electricity generating capacity (102,000 KW in 2010) is generated from fossil fuel; the rest 52.9% is generated from hydropower.	<ul> <li>As defined in the energy policy draft document, the main policy target for electricity is to provide access for 35 % of the population by 2015. No proposed contribution of renewable energy to the electricity generation mix was mentioned.</li> </ul>		
REDUCE	Key transport-related air quality	Vehicle emission limit: (Euro rating) ???		

<sup>&</sup>lt;sup>1</sup> 'Countries of the World - 32 Years of CIA World Fact Books', 2015 <a href="http://www.theodora.com/wfb/#R">http://www.theodora.com/wfb/#R</a>.

EMISSIONS FROM TRANSPORT	challenges: (ex: vehicle growth, old fleet, dirty fuel, poor public transport etc)	Fuel Sulphur content: (in ppm) Fuel (diesel)sulphur content restricted at 3000ppm Fuel Lead content: Unleaded gasoline restrictions since 2005
	• Vehicle emissions are a major source of PM, NO <sub>2</sub> and CO	Restriction on used car importation: ???
	<ul> <li>Freight and passenger transport is usually provided by private companies or individuals</li> </ul>	Actions to expand, improve and promote public transport and mass transit: ???  Actions to promote non-motorized transport: (ex: include sidewalks and bike lanes in new road projects, car-free areas etc) ???
	• Private car ownership is low with 6 car per 1000 individuals in 2008 <sup>2</sup>	Other transport-related actions:
	Two stroke motorcycle are also a common mode of transport outside the main city	•Duty variations based on engine size and car age
REDUCE EMISSIONS FROM OPEN BURNING OF AGRICULTU RAL/ MUNICIPAL WASTE (OUTDOOR)	<ul> <li>Outdoor, open burning: (ex: is it commonly done? burning what kinds of wastes? etc)</li> <li>Municipal solid waste (MSW) management is ranked as the highest priority area for capacity-building<sup>3</sup>.</li> <li>The problem is made worse by increasing rural to urban migration</li> <li>Open burning of waste is common especially in the poor neighbourhoods</li> </ul>	<ul> <li>Legal framework: (ex: is burning banned?)</li> <li>While industrial waste management regulations exist, there are few mechanisms to monitor implementation</li> <li>Actions to prevent open burning of municipal waste and / or agricultural waste:</li> <li>While MSW management policies exist, the country does not have the technical capacity to implement them<sup>4</sup>.</li> </ul>
REDUCE	Dominant fuels used for cooking and	Indoor air pollution regulated: (Yes / No) ???
EMISSIONS FROM OPEN	space heating:	Promotion of non-grid / grid electrification:
BURNING OF BIOMASS (INDOOR)	• Wood is the dominant fuels used for cooking for rural households <sup>5</sup>	•According to the country's second-generation Poverty Reduction Strategy Paper for 2009-2011, a key government objective is the provision of a reliable power supply in the country; moving
	<ul><li>Impact:</li><li>Air pollution from indoor sources is the</li></ul>	toward a low carbon energy economy through use of the country's significant hydropower potential.
	single largest contributor to the negative health effects of air pollution in Sierra	Promotion of cleaner cooking fuels and clean cook stoves: ???

<sup>&</sup>lt;sup>2</sup> World Bank, *Worldwide Total Motor Vehicles (per 1,000 People)*, 2011 <a href="http://chartsbin.com/view/1114">http://chartsbin.com/view/1114</a> [accessed 30 June 2015].

<sup>3</sup> UNEP, 'Global Partnership on Waste Management (GPWM) > Information Platform > Country Waste Management Profiles > Country List', 2015.

<sup>&</sup>lt;sup>4</sup> UNEP.

 $<sup>^{\</sup>rm 5}$  World Bank, The Little Green Data Book 2015 | Data, 2015.

Leone.	Other actions to reduce indoor biomass burning, or to reduce its emissions: ???
• Indoor air pollution causes an estimated 10,800 premature deaths every year <sup>6</sup>	

<sup>6</sup> WHO, 'WHO | Country Profiles of Environmental Burden of Disease', *WHO*, 2008 <a href="http://www.who.int/quantifying\_ehimpacts/national/countryprofile/en/#T>">http://www.who.int/quantifying\_ehimpacts/national/countryprofile/en/#T></a>.