## **Cape Verde Air Quality Overview**

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:air.quality@unep.org">air.quality@unep.org</a>.

Cape Verde Air Quality Overview				
Goals	Status	Current Policies & Programmes		
GENERAL OVERVIEW	Overall situation with respect to air quality in the country, including key air quality challenges:  • Air quality in Cape Verde is relatively clean • Dust blown from the Sahara desert is the most dominant source of air pollution in the country <sup>1</sup> • Increasing vehicle numbers is also a significant source of air pollution • WHO estimates that outdoor air pollution causes <10 premature deaths annually <sup>2</sup> Air quality monitoring system: ???	National Ambient air quality standards: ???  National Air Quality Policy: ???  Air Quality legislation / programmes: ???  Other: ???		
REDUCE EMISSIONS FROM INDUSTRIES	<ul> <li>Industries that have the potential to impact air quality:</li> <li>◆ Air pollution from industrial installations emanates from the following: food and beverages, fish processing, shoes and garments, salt mining, ship repair among others</li> <li>GDP of country: USD 1.955B in 2013³</li> <li>Industries' share of GDP: 18.8%⁴</li> </ul>	Emission regulations for industries: ???  Small installation's emissions regulated: (Yes/No) ???  Renewable energy investment promoted: ???  Energy efficiency incentives: (ex: Subsidies, labelling, rebates etc) ???		

<sup>&</sup>lt;sup>1</sup> M. Almeida-Silva and others, 'Impact of Sahara Dust Transport on Cape Verde Atmospheric Element Particles', *Journal of Toxicology and Environmental Health. Part A*, 76.4-5 (2013), 240–51 <a href="http://dx.doi.org/10.1080/15287394.2013.757200">http://dx.doi.org/10.1080/15287394.2013.757200</a>.

<sup>&</sup>lt;sup>2</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>.

<sup>&</sup>lt;sup>3</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>.

<sup>&</sup>lt;sup>4</sup> 'Countries of the World - 32 Years of CIA World Fact Books'.

	<ul> <li>Electricity sources:</li> <li>96.9% out of the 89.800 kW installed electricity generating capacity is generated from fossil fuels while the rest 3,1% is from renewable energy sources</li> <li>Energy intensity of the industrial sector is (GDP per unit of energy use (constant 2011 PPP \$ per kg of oil equivalent))???</li> <li>Others ???</li> </ul>	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 industrial emissions: (can include incentives to move industries to less populated areas here) ???
REDUCE EMISSIONS FROM TRANSPORT	Key transport-related air quality challenges: (ex: vehicle growth, old fleet, dirty fuel, poor public transport etc)  • Emissions from the transport sector are the most important anthropogenic source of air pollution in Cape Verde.	Vehicle emission limit: (Euro rating)  Fuel Sulphur content: (in ppm)  Sulphur content is limited at 1000ppm  Fuel Lead content:  All vehicles use lead free gasoline  Restriction on used car importation: ???  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) ???
REDUCE EMISSIONS FROM OPEN BURNING: OUTDOOR	<ul> <li>Outdoor, open burning: (ex: is it commonly done? burning what kinds of wastes? etc)</li> <li>Long range transport of biomass burning emissions from west African can sometimes significantly impair air quality in cape Verde<sup>5</sup>.</li> </ul>	Legal framework: (ex: is burning banned?) ???  Actions to prevent open burning of municipal waste and / or agricultural waste: ???
REDUCE EMISSIONS FROM OPEN	Dominant fuels used for cooking and space heating:  ■ 68.7% of the population has access to non-solid fuels <sup>6</sup>	Indoor air pollution regulated: (Yes / No) ???  Promotion of non-grid / grid electrification: ???

<sup>&</sup>lt;sup>5</sup> SILKE GROSS MATTHIAS TESCHE, 'Profling of Saharan Dust and Biomass Burning Smoke with Multiwavelength Polarization Raman Lidar at Cape Verde', *Tellus B*, 63.4 (2011), 649–76 <a href="http://dx.doi.org/10.1111/j.1600-0889.2011.00548.x">http://dx.doi.org/10.1111/j.1600-0889.2011.00548.x</a>.

<sup>6</sup> 'World Development Indicators | World DataBank' <a href="http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators#">http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators#</a> [accessed 16

<sup>&</sup>lt;sup>6</sup> 'World Development Indicators| World DataBank' <a href="http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators#">http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators#</a> [accessed 16 November 2015].

BURNING:	• 70.6% of the population has access to electricity <sup>7</sup>	Promotion of cleaner cooking fuels and clean cook stoves:
INDOOR	Impact:  • WHO estimates that indoor air pollution causes <100 premature deaths annually <sup>8</sup>	<ul> <li>The Ministry of Environment, Rural Development and Marine Resources ensures the implementation of the production and the assembly of wind pumps and the construction of improved stoves.</li> <li>Other actions to reduce indoor biomass burning, or to reduce its emissions: ???</li> </ul>

 $<sup>^{7}</sup>$  'World Development Indicators  $\mid$  World DataBank'.  $^{8}$  WHO.