

Namibia 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.

Namibia Air Quality Policy Matrix		
Goals	Status	Current Policies & Programmes
GENERAL OVERVIEW	<p>Overall situation with respect to air quality in the country, including key air quality challenges: Not so bad overall, the single highest emission source could be hydrocarbons but with improvements in catalytic converters and the introduction of cleaner fuels, improvements in air quality levels are to be expected.</p> <ul style="list-style-type: none"> • WHO estimates that outdoor air pollution causes <100 premature deaths annually¹ <p>Air quality monitoring system: None</p> <ul style="list-style-type: none"> • 	<p>National Ambient air quality standards: None</p> <p>National Air Quality Policy: Not in place</p> <p>Air Quality legislation / programmes: None</p> <p>Other:</p>
REDUCE EMISSIONS FROM INDUSTRIES	<p>Industries that have the potential to impact air quality:</p> <ul style="list-style-type: none"> • Air pollution from industrial installations emanates from the following: meat processing, fish processing, dairy products, pasta, beverages; mining (diamonds, lead, zinc, tin, silver, tungsten, uranium, copper) among others 	<p>Emission regulations for industries:</p> <p>Small installation's emissions regulated: No</p> <p>Renewable energy investment promoted:</p> <ul style="list-style-type: none"> • Presently, in Namibia, renewable energy technologies are being widely used mostly for off-grid electrification and domestic water heating. • Between 2007 and 2010, the Namibian Renewable Energy Program (NAMREP) was developed to remove financial, economic, political and public awareness barriers to

¹ WHO, 'WHO | Country Profiles of Environmental Burden of Disease', WHO, 2008
http://www.who.int/quantifying_ehimpacts/national/countryprofile/en/#T.

	<p>GDP of country: USD 12.3 B in 2013²</p> <p>Industries' share of GDP: 29.6%³</p> <p>Electricity sources:</p> <ul style="list-style-type: none"> ● 31.8% of the installed electricity generating capacity (487,000 KW in 2010) is generated from fossil fuel and the rest 68.2% from hydroelectric plants⁴ <p>Others</p> <ul style="list-style-type: none"> ● 	<p>solar energy.</p> <p>Energy efficiency incentives: (<i>ex: Subsidies, labelling, rebates etc</i>) The Ministry of Mines and Energy has the Solar Revolving Fund (SRF, a loan facility) that makes loans available to consumers to access renewable energy technologies (solar home systems for lighting, powering home appliances and for water pumping for farmers). The SRF interest rate is affordable and is lower than what commercial banks are offering.</p> <p>Incentives for clean production and installation of pollution prevention technologies: SRF</p> <p>Actions to ensure compliance with regulations: (<i>monitoring, enforcement, fines etc</i>) None</p> <ul style="list-style-type: none"> ● Other actions at national, sub-national and / or local level to reduce industrial emissions: The introduction of cleaner fuels, unleaded petrol and low sulphur diesel (0.005% S Diesel is available countrywide, an improvement over the years from 0.55% S.)
<p>REDUCE EMISSIONS FROM TRANSPORT</p>	<p>Key transport-related air quality challenges: (<i>ex: vehicle growth, old fleet, dirty fuel, poor public transport etc</i>)</p> <ul style="list-style-type: none"> ● Vehicle emissions are a major source of PM, NO2 and CO ● Public transport is mainly run by private companies or individuals ● Private car ownership is low with 107 cars per 1000 individuals in 2008⁵ ● The vehicle fleet is characterized by aged vehicle with the average vehicle age being 16 years in 2014. 	<p>Vehicle emission limit: (<i>Euro rating</i>) ???</p> <p>Fuel Sulphur content: (<i>in ppm</i>) 500 ppm standard, although 50 ppm is available countrywide⁶</p> <p>Fuel lead content: Unleaded gasoline restrictions since 2006. Leaded gasoline phased out completely in 2005 and replaced with Lead Replacement petrol (LRP) which has also been phased out in 2013.</p> <p>Restriction on used car importation:</p> <p>Actions to expand, improve and promote public transport and mass transit: None, although there is a need to address the issue.</p> <p>Actions to promote non-motorized transport: (<i>ex: include sidewalks and bike lanes in new road projects, car-free areas etc</i>)</p> <p>Other transport-related actions:</p>

² 'Countries of the World - 32 Years of CIA World Fact Books', 2015 <<http://www.theodora.com/wfb/#R>>.

³ 'Countries of the World - 32 Years of CIA World Fact Books'.

⁴ 'Countries of the World - 32 Years of CIA World Fact Books'.

⁵ World Bank, *Worldwide Total Motor Vehicles (per 1,000 People)*, 2011 <<http://chartsbin.com/view/1114>> [accessed 30 June 2015].

⁶ UNEP, 'UNEP - Transport - Partnership for Clean Fuels and Vehicles', 2015 <<http://www.unep.org/transport/new/pcfvt/>> [accessed 28 September 2015].

<p>REDUCE EMISSIONS FROM OPEN BURNING: OUTDOOR</p>	<p>Outdoor, open burning: <i>(ex: is it commonly done? burning what kinds of wastes? etc)</i></p> <ul style="list-style-type: none"> ● Uncontrolled waste burning is one of the practices that contributes to deteriorating air quality in urban centres ● Agricultural waste burning can also impact air quality in the rural areas. <p>Due to the waste composition (plastics, waste tires, and other organic/inorganic materials) unregulated waste burning can be a source of health impairing emissions such as dioxins and furans</p>	<p>Legal framework: <i>(ex: is burning banned?)</i> None</p> <p>Actions to prevent open burning of municipal waste and / or agricultural waste:</p> <p>Dumpsites are in place per waste category: domestic waste and construction material, only medical waste is burned (incinerated).</p>
<p>REDUCE EMISSIONS FROM OPEN BURNING: INDOOR</p>	<p>Dominant fuels used for cooking and space heating:</p> <ul style="list-style-type: none"> ● Wood is the dominant fuels used for cooking accounting for 70% of the energy mix in Zambia ● The majority of the population relies heavily on charcoal and firewood for heating and cooking, whilst candles and kerosene are used for lighting. <p>Impact:</p> <ul style="list-style-type: none"> ● Indoor air pollution causes an estimated 100 premature deaths every year⁷ <p>Other</p> <ul style="list-style-type: none"> ● Air pollution from indoor sources is the single largest contributor to the negative health effects of air pollution in Namibia. 	<p>Indoor air pollution regulated: <i>(Yes / No)</i> No</p> <p>Promotion of non-grid / grid electrification: Yes, especially in remote areas that cannot be connected to the grid. In urban areas solar panels are installed on some buildings to generate own power and all new government buildings should have solar power for water heating and additional power.</p> <p>Promotion of cleaner cooking fuels and clean cook stoves:</p> <ul style="list-style-type: none"> ● Namibian urban households' electrification is estimated at 70%, whereas for rural households, it has reached 25% in 2011. <p>Other actions to reduce indoor biomass burning, or to reduce its emissions: Energy efficient stoves are promoted to reduce reliance on biomass and or electricity/gas for cooking.</p>

⁷ WHO.