**Zambia 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.

| **Zambia Air Quality Policy Matrix** | | |
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| **Goals** | **Status** | **Current Policies & Programmes** |
| GENERAL OVERVIEW | **Overall situation with respect to air quality in the country, including key air quality challenges**: **???**<br>**Air quality monitoring system**: **???** | **National Ambient air quality standards**: **???**<br>**National Air Quality Policy**: **???**<br>**Air Quality legislation / programmes**:<br>● Air pollution is regulated under the Environmental Management Act and the air pollution control (licensing and emissions standards) regulation of 1996<br>**Other**: **???** |
| REDUCE EMISSIONS FROM INDUSTRIES | **Industries that have the potential to impact air quality**:<br>● The most important industry is copper mining followed by other minor industries that include chemical and fertilizer manufacture among others<br>**GDP of country**: at USD 22.8B in 2013[1]<br>**Industries' share of GDP**: 33% of GDP[2]<br>**Electricity sources**:<br>● Only 0.4% of the installed electricity generating capacity (1.678 million KW in 2010) is generated from fossil fuel, the rest 99.6% is generated from hydropower[3]<br>**Other** | **Emission regulations for industries**:<br>● Individual operating permits may have provisions regarding air emissions or effluents.<br>**Small installation's emissions regulated**: *(Yes/No)* **???**<br>**Renewable energy investment promoted**:<br>● The National Energy Policy 2008 sets out a number of policy measures for renewable energy, including the investigation of RE potentials, the strengthening of the institutional framework for RE research and development, and the provision of financial and fiscal implements for the stimulation of RE deployment.<br>● Feed-in tariffs to encourage power generation from renewable sources<br>**Energy efficiency incentives:** *(ex: Subsidies, labelling, rebates etc)* **???**<br>**Incentives for clean production and installation of pollution prevention technologies**: **???**<br>**Actions to ensure compliance with regulations:** *(monitoring, enforcement, fines etc)* **???**<br>**Other actions at national, sub-national and / or local level to reduce industry**: *(can include* |

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

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| | • SO2 and PM are some of the most important air pollutant in the country | *incentives to move industries to less populated areas here)* **???**<br>• The development plans based on the Energy Policy 1994, and the succeeding policy in May 2008, have put more emphasis on grid hydro-electricity compared to other renewable energy technologies. |
| REDUCE EMISSIONS FROM TRANSPORT | **Key transport-related air quality challenges**: *(ex: vehicle growth, old fleet, dirty fuel, poor public transport etc)*<br>• Vehicle emissions are a major source of PM, NO2 and CO<br>• Public transport is mainly run by private companies or individuals<br>• Private car ownership is low with 21 car per 1000 individuals in 2008<br>• The vehicle fleet is characterized by aged vehicle with the average vehicle age being 16 years in 2014. | **Vehicle emission limit**: *(Euro rating)* **???**<br>**Fuel Sulphur content**: *(in ppm)*<br>• restricted at 5000ppm (for local refinery diesel and 500ppm imported diesel)[4]<br>**Fuel lead content**<br>• Unleaded gasoline restrictions since 2006<br>**Restriction on used car importation**:<br>• There are no age limitations on second hand imports<br>• Duty charged on imported vehicle is based on the value of the car, which encourages the import of older cheaper cars<br>• Pre-importation inspection is required for road worthiness<br>**Actions to expand, improve and promote public transport and mass transit**: **???**<br>**Actions to promote non-motorized transport**: *(ex: include sidewalks and bike lanes in new road projects, car-free areas etc)*<br>**Other transport-related actions**: **???** |
| REDUCE EMISSIONS FROM OPEN BURNING OF WASTE | **Outdoor, open burning**: *(ex: is it commonly done? burning what kinds of wastes? etc*)<br>• Uncontrolled waste burning is one of the practices that contributes to deteriorating air quality in urban centres<br>• Agricultural waste burning can also impact air quality in the rural areas.<br>• Due to the waste composition (plastics, waste tires, and other organic/inorganic materials) unregulated waste burning can be a source of health impairing emissions | **Legal framework***: (ex: is burning banned?)* **???**<br>**Actions to prevent open burning of municipal waste and / or agricultural waste**: **???** |

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

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| | such as dioxins and furans | |
| REDUCE EMISSIONS FROM BIOMASS BURNING (INDOORS) | **Dominant fuels used for cooking and space heating**:<br>● Wood is the dominant fuels used for cooking accounting for 80% of the energy mix in Zambia[5]<br>● The majority of the population relies heavily on charcoal and firewood for heating and cooking, whilst candles and kerosene are used for lighting.<br>**Impact**:<br>● Indoor air pollution causes an estimated 8,700 premature deaths every year<br>**Other**<br>● Air pollution from indoor sources is the single largest contributor to the negative health effects of air pollution in Zambia.<br>● Only 16.7% of households in Zambia have access to electricity.<br>● In 2009, approximately 18.8% of the Zambian population had electricity access. In 2008, the urban access rate was 44%, with the rural access rate being just 2.2%. | **Indoor air pollution regulated**: *(Yes / No)* **???**<br>**Promotion of non-grid / grid electrification**:<br>● Promotion of rural electrification<br>● Also covered under the Sixth National Development Plan are plans to further implement the Rural Electrification Master Plan (REMP)<br>**Promotion of cleaner cooking fuels and clean cook stoves**: **???**<br>**Other actions to reduce indoor biomass burning, or to reduce its emissions**: **???** |

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