

Uganda 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.

Uganda 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:</p> <ul style="list-style-type: none"> • Most emissions are associated with combustion facilities within the industries, e.g. boilers and standby power generators. • Currently no data is available on the impacts of these emissions on human health or the environment. • Particulate matter is considered the most important air pollutant in the country • O3 is also becoming a pollutant of concern in the country <p>Air quality monitoring system: ???</p>	<p>National Ambient air quality standards: ???</p> <p>National Air Quality Policy: ???</p> <p>Air Quality legislation / programmes: ???</p> <ul style="list-style-type: none"> • Air quality standards and regulations proposed in 2005 under the National Environmental Acts Cap 153. However, this standards and regulation have not yet been promulgated <p>Other: ???</p>
REDUCE EMISSIONS FROM INDUSTRIES	<p>Industries that have the potential to impact air quality:</p> <ul style="list-style-type: none"> • Sugar, brewing, tobacco, cotton textiles; cement and steel production are some of the major industries in Uganda¹ <p>GDP of country: USD 22.6 B in 2013</p> <p>Industries' share of GDP: 26.9%</p> <p>Electricity sources:</p> <ul style="list-style-type: none"> • 31.5% of the installed electricity generating capacity 	<p>Emission regulations for industries: ???</p> <p>Small installation's emissions regulated: (Yes/No) ???</p> <p>Renewable energy investment promoted:</p> <ul style="list-style-type: none"> • The renewable energy policy objectives include increasing access to modern, affordable and reliable energy services as a contribution to poverty eradication. • This comprises general public access to electricity and enhancing the modernization of biomass conversion technologies. • The overall policy goal is: "To increase the use of modern renewable energy, from the current 4% to 61% of the total energy consumption by the year 2017".

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

	<p>(539,000 KW in 2010) is generated from fossil fuel; and 65.3% is generated from hydropower and the rest 3.2% is generated from various renewable sources.</p> <ul style="list-style-type: none"> • Due to the lack of grid development, a number of companies generate their own electricity. • Growth in industrial emissions is projected to increase in the coming years 	<ul style="list-style-type: none"> • The Renewable Energy Policy establishes a Standardized Power Purchase Agreement and Feed-in Tariffs for renewable energy generation projects. • It also introduces favourable financial and fiscal regimes for renewable energy technologies, including: <ul style="list-style-type: none"> • Preferential tax treatment or tax exemption, • Accelerated depreciation, • Provision of risk mitigation mechanisms and credit enhancement instruments, • Credit mechanisms for renewable energy consumers. <p>Energy efficiency incentives: <i>(ex: Subsidies, labelling, rebates etc) ???</i></p> <p>Incentives for clean production and installation of pollution prevention technologies: <i>???</i></p> <p>Actions to ensure compliance with regulations: <i>(monitoring, enforcement, fines etc) ???</i></p> <p>Other actions at national, sub-national and / or local level to reduce industry: <i>(can include incentives to move industries to less populated areas here) ???</i></p>
<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"> • Transport accounts for more than 75% of the air pollution problem in Uganda urban areas • Two stroke motorbikes are one of the major sources of air pollutants in urban centres. • One of the fastest growing sectors in Uganda with an average growth rate of 18.2% between 2010 and 2011. • The sector is estimated to emit up to 40% of all PM in urban areas • The sector is also an important indirect source of O3 	<p>Vehicle emission limit: <i>(Euro rating) ???</i></p> <ul style="list-style-type: none"> • Vehicle emission standards (not implemented yet) <p>Fuel Sulphur content: <i>(in ppm);</i> Fuel sulphur content capped at 50ppm</p> <p>Fuel Lead content; Phasing out of leaded fuel</p> <p>Restriction on used car importation:</p> <ul style="list-style-type: none"> • Pre-shipment inspection of vehicles before import, although this tests for roadworthiness of the vehicle. <p>Actions to expand, improve and promote public transport and mass transit:</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: <i>???</i></p>
<p>REDUCE EMISSIONS FROM OPEN BURNING</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 	<p>Legal framework: <i>(ex: is burning banned?)</i></p> <p>Regulated by the National Environment (waste management) Regulation</p> <p>Actions to prevent open burning of municipal waste and / or agricultural waste:</p>

<p>OF WASTE (OUTDOOR)</p>	<p>contributes to deteriorating air quality in urban centres</p> <ul style="list-style-type: none"> ● Agricultural waste burning also impacts air quality in the rural areas. ● 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>
<p>REDUCE EMISSIONS FROM BIOMASS BURNING (INDOORS)</p>	<p>Dominant fuels used for cooking and space heating:</p> <ul style="list-style-type: none"> ● Wood is the dominant fuels used by the poor for cooking accounting for 90% of the energy mix in Uganda² ● Impact: ● Solid fuel combustion causes an estimated 18,000 premature deaths every year³ <p>Others</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 Uganda. ● Adoption rate for clean fuels is very low despite several policies and initiative to stimulate this ● In 2009, only about 9% of the population had access to the electricity grid⁴. ● In rural areas, where more than 85% of the population lives, roughly 1% of the households are connected to the grid, while the remainder generates electricity from household diesel generators, batteries and solar photovoltaic systems (PV). 	<p>Indoor air pollution regulated: (Yes / No) ???</p> <p>Promotion of non-grid / grid electrification: ???</p> <p>Promotion of cleaner cooking fuels and clean cook stoves:</p> <ul style="list-style-type: none"> ● The government is promoting the use of energy saving bulbs by distributing approximately 800,000 of them to low-income households. <p>Other actions to reduce indoor biomass burning, or to reduce its emissions: ???</p>

² Lisa Yu-Ting Lee, 'Household Energy Mix in Uganda', *Energy Economics*, 39 (2013), 252–61 <<http://dx.doi.org/10.1016/j.eneco.2013.05.010>>.

³ WHO, 'WHO | Country Profiles of Environmental Burden of Disease', *WHO*, 2008 <http://www.who.int/quantifying_ehimpacts/national/countryprofile/en/#T>.

⁴ 'Reegle - Clean Energy Information Gateway', *Reegle - Clean Energy Information Gateway* <<http://www.reegle.info>> [accessed 22 September 2015].