

Sudan 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.

Sudan 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: The air pollution in Sudan is considered limited compared with other countries, because Sudan is an agricultural country. Household combustion devices, motor vehicles, industrial facilities. Pollutants of major public health, concern include particulate matter, carbon monoxide, nitrogen dioxide and sulphur dioxide. Outdoor and indoor air pollution cause respiratory and other diseases, which can be fatal.</p> <p>Air quality monitoring system: air quality monitoring system with Ministry of Environment but not operated; comprises of fixed monitoring system (4) units and mobile measuring system (3) units</p>	<p>National Ambient air quality standards: Yes (unspecified by focal point)</p> <p>National Air Quality Policy: part of a draft National Environmental management plan</p> <p>Air Quality legislation / programmes: under Environmental Protection Act 2001 and Environmental Health 2009</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"> ● Oil production and processing is the most important industry in both economic and emission terms, other industries include power stations, cement, brick factories, chemical factories, sugar, tanneries, ● Manufacturing industries are mostly focused on processing agricultural products, with a few other industries such as cement production 	<p>Emission regulations for industries: draft emission regulations</p> <ul style="list-style-type: none"> ● Industry is subject to national- and state-level environmental legislation, but the enforcement of existing laws is limited and difficult. <p>Small installation's emissions regulated: Yes</p> <p>Renewable energy investment promoted: Yes, there is a strategic plan to promote electricity, including renewable energy sources, and there is an investment policy to help in this</p> <p>Energy efficiency incentives: (<i>ex: Subsidies, labelling, rebates etc</i>) Yes- tax</p>

	<ul style="list-style-type: none"> ● Cement manufacturing is a dominant source of PM emissions in Sudan ● Most other industrial emissions are associated with combustion facilities within the industries, e.g. boilers and standby power generators. <p>GDP of country: USD 52.5 B in 2013¹</p> <p>Industries' share of GDP: 33.6%</p> <p>● Electricity sources:</p> <ul style="list-style-type: none"> ● 30.7% of the installed electricity generating capacity (2.083million KW in 2010) is generated from fossil fuel; and 66.3% is generated from hydropower and the rest 3% is generated from various renewable sources. <p>Others</p> <ul style="list-style-type: none"> ● 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 ● Growth in industrial emissions is projected to increase in the coming years 	<p>exemptions</p> <p>Incentives for clean production and installation of pollution prevention technologies: No</p> <p>Actions to ensure compliance with regulations: (<i>monitoring, enforcement, fines etc</i>) There are regulations, but these have not been activated</p> <p>Other actions at national, sub-national and / or local level to reduce industrial emissions: (<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 is the main source of air pollutant in Sudan urban centres ● Rapid increase in vehicle numbers in major cities, driven by increased urban population, economic development and urbanization ● Old vehicles, poor maintenance and inefficient public transport are factors driving emissions in the transport 	<p>Vehicle emission limit: (<i>Euro rating</i>) ???</p> <p>Fuel Sulphur content: (<i>in ppm</i>)</p> <ul style="list-style-type: none"> ● Petrol sulphur content capped at 500ppm³ ● Diesel sulphur content capped at 350 ppm <p>Fuel Lead content: leaded fuel was phased out in 2002</p> <p>Restriction on used car importation: imported second hand vehicles are illegal, except for immigrants, vintage and racing cars, vehicles adapted for physically disabled, and donated vehicles for welfare organizations⁴</p>

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

³ UNEP, 'UNEP - Transport - Partnership for Clean Fuels and Vehicles', 2015 <<http://www.unep.org/transport/new/pcfvt/>> [accessed 28 September 2015].

	sector •Generally vehicle ownership in Sudan is low at 27 in 1000 in 2007 ²	Actions to expand, improve and promote public transport and mass transit: ??? Actions to promote non-motorized transport: (<i>ex: include sidewalks and bike lanes in new road projects, car-free areas etc</i>) Weak Other transport-related actions: ???
REDUCE EMISSIONS FROM OPEN BURNING OF WASTE (OUTDOOR)	Outdoor, open burning: (<i>ex: is it commonly done? burning what kinds of wastes? etc</i>) It is common to burn municipal and agricultural waste	Legal framework: (<i>ex: is burning banned?</i>) There is a draft legal framework being developed Actions to prevent open burning of municipal waste and / or agricultural waste: There are sanctions to prevent burning of municipal waste and agricultural by the Ministry of Agricultural and Forestry, but these aren't activated
REDUCE EMISSIONS FROM BIOMASS BURNING (INDOORS)	Dominant fuels used for cooking and space heating: natural gas, wood, animal waste Impact:	Indoor air pollution regulated: (<i>Yes / No</i>) Yes Promotion of non-grid / grid electrification: Yes Promotion of cleaner cooking fuels and clean cook stoves: Yes, gas is used more than biomass Other actions to reduce indoor biomass burning, or to reduce its emissions: Various projects from local and international organisations

Secondary Sources used in the research:

- MINISTRY OF ENVIRONMENT NATURAL RESOURCES, AND PHYSICAL DEVELOPMENT
- STANDARDS ORGANIZATION- SUDAN - CENTRAL BUREAU OF STATISTICS
- MINISTRY OF INDUSTRY

⁴ UNEP.

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