

Egypt 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.

Egypt 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> <p>Air quality monitoring system: ???</p> <ul style="list-style-type: none"> The government has developed a national monitoring network for the dust emissions from cement factories 	<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 is one of the principal issues addressed in Law 4/1994 for the Environment. <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; Small smelters, brick factories, oil refineries, thermal power stations, and metallurgical factories. Other important industries are Textiles, food processing, tourism, chemicals, pharmaceuticals, construction, cement manufacture and light manufacture among others <p>GDP of country: USD 262B in 2013¹</p>	<p>Emission regulations for industries: ???</p> <p>Small installation's emissions regulated: (Yes/No) ???</p> <p>Renewable energy investment promoted: ???</p> <p>Energy efficiency incentives: (ex: Subsidies, labelling, rebates etc) ???</p> <ul style="list-style-type: none"> The government has prepared a National Energy Conservation plan, and has set up an inter-ministerial energy conservation coordination group to oversee the activities of energy consumers and suppliers in promoting more efficient use of energy <p>Incentives for clean production and installation of pollution prevention technologies: ???</p> <ul style="list-style-type: none"> Egypt's Lead Smelter Action Plan addresses the high emissions from the smelters by promoting the use of more environmentally friendly technology in the smelting industry, and by supporting the relocation of all lead smelting activities away from densely populated areas

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

	<p>Industries' share of GDP: 24%</p> <ul style="list-style-type: none"> ● Electricity sources: ● 87.6% of the installed electricity generating capacity (26.91 million KW in 2010) is generated from fossil fuel; 10.4% is generated from hydropower and the rest 2% is generated from other renewable sources². ● Industrial emissions are the second largest contributor to PM10 pollution after waste burning 	<p>Actions to ensure compliance with regulations: (<i>monitoring, enforcement, fines etc</i>) ???</p> <ul style="list-style-type: none"> ● 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>) ??? ● The government has piloted the use of compressed natural gas in brick factories instead of the more polluting mazout as fuel. This pilot will be expanded to cover about 258 brick factories in the same area
REDUCE EMISSIONS FROM TRANSPORT	<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 the most important sources of air pollution in Egypt urban centres, ● Road transports in is major source of NOx, CO, NMVOCs and SO2 ● In 2007 Egypt had a vehicle population of 4.1 million and 730,000 motor cycles. 25% of this fleet was more than 25 years old ● Private car ownership is low with 30 car per 1000 individuals in 2006³ ● Municipal bus and tram services operate in the major cities. 	<p>Vehicle emission limit: (<i>Euro rating</i>) Euro 2 and euro 3 emission standards</p> <p>Fuel Sulphur content: (<i>in ppm</i>): Fuel (diesel) sulphur content is predominantly between 6000 and 7000ppm</p> <p>Fuel Lead content: Only unleaded fuels is sold in the country</p> <p>Restriction on used car importation: Age restriction on importing used cars is at 3 years</p> <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> <ul style="list-style-type: none"> ● On-road testing of vehicles with mobile emission analysers has been enforced ● The introduction of CNG buses into the fleets of the public bus companies of Greater Cairo area ● Use of municipal bus and tram services limits the need to use private cars ● Introduction of LPG and CNG systems in transport fleets, including public transport.
REDUCE EMISSIONS	<p>Outdoor, open burning: (<i>ex: is it commonly done? burning what kinds of</i></p>	<ul style="list-style-type: none"> ● Several initiatives have been initiated by the government in an effort to better manage solid waste, among them are;

² 'Countries of the World - 32 Years of CIA World Fact Books'.

³ World Bank, 'Motor Vehicles (per 1,000 People) | Data | Table', 2014

<<http://web.archive.org/web/20140209114811/http://data.worldbank.org/indicator/IS.VEH.NVEH.P3>> [accessed 25 September 2015].

<p>FROM OPEN BURNING: OUTDOOR</p>	<p><i>wastes? etc)</i></p> <ul style="list-style-type: none"> ● Garbage burning is the most important source of PM10 pollutant in Egypt ● Municipal waste generation has been on the increase due to changing consumption patterns. ● The collection efficient of this waste especially in the urban areas is low (at 50%) ● There are limited sanitary landfills for these waste leading to the open burning of this waste ● Burning of agricultural waste is a leading source of PM10 	<p>Legal framework: <i>(ex: is burning banned?) ???</i></p> <p>Actions to prevent open burning of municipal waste and / or agricultural waste:</p> <ul style="list-style-type: none"> ● Started the implementation of the national strategy for Integrated Solid Waste Management at the governorate level
<p>REDUCE EMISSIONS FROM OPEN BURNING: INDOOR</p>	<p>Dominant fuels used for cooking and space heating:</p> <p>Egyptian electrification rates in 2008 were approximately 99.4% according to the International Energy Agency (IEA)</p> <p>Impact:</p> <ul style="list-style-type: none"> ● Indoor air pollution causes an estimated 600 premature deaths every year⁴ ● Poor indoor air quality is mainly driven by materials selection and construction practices 	<p>Indoor air pollution regulated: <i>(Yes / No)</i></p> <p>Promotion of non-grid / grid electrification:</p> <p>Promotion of cleaner cooking fuels and clean cook stoves:</p> <p>Other actions to reduce indoor biomass burning, or to reduce its emissions:</p> <ul style="list-style-type: none"> ● Some of the initiative being carried out to increase energy efficiency in households include: <ul style="list-style-type: none"> ● National Efficient Lighting Initiative (NELI), including encouraging local manufacturing of CFLs. ● Energy efficiency standards & labelling (refrigerators, air conditioners and washing machines), including the adoption of cost-effective standards, and analysis of EE improvement technologies. ● Public awareness programme to encourage EE lamp adoption⁵.

⁴ WHO, 'WHO | Country Profiles of Environmental Burden of Disease', WHO, 2008 <http://www.who.int/quantifying_ehimpacts/national/countryprofile/en/#T>.

⁵ 'Reegle - Clean Energy Information Gateway', Reegle - Clean Energy Information Gateway <<http://www.reegle.info>> [accessed 22 September 2015].