

## Saudi Arabia 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](mailto:Vered.Ehsani@unep.org) and [George.Mwaniki@unep.org](mailto:George.Mwaniki@unep.org).

<b>Saudi Arabia Air Quality Policy Matrix</b>		
<b>Goals</b>	<b>Status</b>	<b>Current Policies &amp; Programmes</b>
<b>GENERAL OVERVIEW</b>	<p><b>Overall situation with respect to air quality in the country, including key air quality challenges:</b></p> <ul style="list-style-type: none"> <li>• Over the past few decades, as Saudi Arabia's oil industry has boomed, this has also resulted in several environmental challenges among them poor air quality.</li> <li>• The country vehicular and industrial emissions are the major anthropogenic drivers of air pollution. With vehicular emissions contributing up to 50% of the hydrocarbon emissions in the country</li> <li>• Natural sources of air pollution are also important in the kingdom based on its dry desert climate, where windstorms can significantly affect air quality</li> <li>• <b>Air quality monitoring system: ???</b></li> </ul>	<p><b>National Ambient air quality standards: ???</b></p> <ul style="list-style-type: none"> <li>• Ambient Air Standard 2012 was published and made mandatory on March 24, 2012.</li> <li>• The Standard prescribes limit values for ambient air quality parameters and establishes the responsibilities of the Presidency of Metrology and Environment (PME) with regard to managing ambient air quality in the kingdom.</li> <li>• The Standard aims to provide a basis for the maintenance and restoration of ambient air quality in an effort to prevent or reduce harmful effects on human health and the environment.</li> <li>• It introduces new limits for companies that are required to manage their emissions. However, if the company performs one of the exempted activities, the limits stated by this Standard would not apply.</li> </ul> <p><b>National Air Quality Policy: ???</b></p> <p><b>Air Quality legislation / programmes: ???</b></p> <ul style="list-style-type: none"> <li>• <b>Other: ???</b></li> </ul>
<b>REDUCE EMISSIONS FROM INDUSTRIES</b>	<p><b>Industries that have the potential to impact air quality:</b></p> <ul style="list-style-type: none"> <li>• Air pollution from industrial installations emanates from the following; Crude oil production, petroleum refining, basic petrochemicals industries, ammonia, sodium hydroxide (caustic soda), cement, fertilizer, plastics, metals, commercial ship repair, commercial aircraft repair, construction among others.</li> <li>• Industrial emissions are the most important emission</li> </ul>	<p><b>Emission regulations for industries:</b></p> <ul style="list-style-type: none"> <li>• Ambient Air Standard 2012 was published and made mandatory on March 24, 2012. The Standard prescribes limit values for ambient air quality parameters</li> <li>• The standard introduces new emission limits for companies that are required to manage their emissions.</li> </ul> <p><b>Small installation's emissions regulated: (Yes/No) ???</b></p> <p><b>Renewable energy investment promoted: ???</b></p>

	<p>sources of PM, NOx and SO2</p> <p><b>GDP of country:</b> USD 718.5B in 2013</p> <p><b>Industries' share of GDP:</b> 62.5%</p> <ul style="list-style-type: none"> <li>• The petroleum industry accounts for 45% of the GDP</li> <li>• <b>Electricity sources:</b></li> <li>• 100% of the installed electricity generating capacity (49.05 million KW in 2010) is generated from fossil fuel.</li> </ul>	<p><b>Energy efficiency incentives:</b> (<i>ex: Subsidies, labelling, rebates etc</i>)</p> <ul style="list-style-type: none"> <li>• A <i>National Energy Efficiency Program (NEEP)</i> was started in 2003 with technical support from the UN Department for Economic and Social Affairs (UN-DESA) and funding from Saudi Electricity Company and Saudi Basic Industries Corporation.</li> <li>• The programme implemented energy auditing in the industrial and commercial sectors among many other energy efficiency initiative in both industrial and residential facilities.</li> <li>• Phase 2 of the NEEP was started in 2012 with a support from UNDP.</li> <li>• The project focuses on four major outcomes with overall goal of capacity development for the new Saudi Energy Efficiency Centre: design of the first Energy Conservation Law and related action plans and regulations</li> </ul> <p><b>Incentives for clean production and installation of pollution prevention technologies: ???</b></p> <p><b>Actions to ensure compliance with regulations:</b> (<i>monitoring, enforcement, fines etc</i>) ???</p> <ul style="list-style-type: none"> <li>• <b>Other actions at national, sub-national and / or local level to reduce industrial emissions:</b> (<i>can include incentives to move industries to less populated areas here</i>) ???</li> </ul>
<p>REDUCE EMISSIONS FROM TRANSPORT</p>	<p><b>Key transport-related air quality challenges:</b> (<i>ex: vehicle growth, old fleet, dirty fuel, poor public transport etc</i>)</p> <ul style="list-style-type: none"> <li>• Saudi Arabia encourages road transport; this is demonstrated by the considerably low cost of gasoline which stood at USD 0.16 per liter in August 2012.</li> <li>• The transport sector is by far the most energy-intensive in the country, accounting for almost a third of total final energy consumption.</li> <li>• The country is estimated to have 4 million passenger vehicles on the road and 2.1 million commercial vehicles on the road in 2013<sup>1</sup>.</li> </ul>	<p><b>Vehicle emission limit:</b> (<i>Euro rating</i>) ???</p> <p><b>Fuel Sulphur content:</b> (<i>in ppm</i>):</p> <p><b>Fuel Lead content:</b></p> <p><b>Restriction on used car importation:</b></p> <p><b>Actions to expand, improve and promote public transport and mass transit: ???</b></p> <p>In 2013 the Saudi Council of Ministers, approved the transport master plan, this master plan includes the construction of several public transport facilities. Among them a rail and bus network, public transportation stations, a trap system, and marine transportation lines, all these are expected to encourage the use of public transport.</p> <p><b>Actions to promote non-motorized transport:</b> (<i>ex: include sidewalks and bike lanes</i>)</p>

<sup>1</sup> 'Market Information - U.S.-Saudi Arabian Business Council' <<http://www.us-sabc.org/i4a/pages/Index.cfm?pageID=4079>> [accessed 27 August 2015].

	<ul style="list-style-type: none"> <li>• More than half of the vehicles on the road in Saudi Arabia are more than 5 years old, and approximately 22 percent are more than ten years old<sup>2</sup>.</li> <li>• New car sales growth is estimated at 6.7% annually. BMI forecasts growth from 2014-2019 to be approximately 19 percent for new passenger cars and commercial vehicle sales. The Saudi auto market is expected to reach annual sales of one million units by the end of the decade. Saudi's population is 29 million.</li> <li>• The country's growing youth population, rising disposable income levels, its favorable financing environment, and greater public and private sector investments, has all contributed to Saudi's increased vehicle demand.</li> <li>• Private car ownership is high with 336 cars per 1000 individuals in 2012</li> </ul>	<p><i>in new road projects, car-free areas etc) ???</i></p> <ul style="list-style-type: none"> <li>• <b>Other transport-related actions:</b></li> <li>• In 2014, Saudi Arabia established corporate average fuel economy standards (CAFE) to reduce domestic oil consumption.</li> <li>• The standards aim to improve fuel economy in Saudi Arabia for total road transportation by 2025.</li> </ul>
<p>REDUCE EMISSIONS FROM OPEN BURNING: OUTDOOR</p>	<p><b>Outdoor, open burning:</b> <i>(ex: is it commonly done? burning what kinds of wastes? etc) ???</i></p>	<p><b>Legal framework:</b> <i>(ex: is burning banned?) ???</i></p> <p><b>Actions to prevent open burning of municipal waste and / or agricultural waste:</b> ???</p>
<p>REDUCE EMISSIONS FROM OPEN BURNING: INDOOR</p>	<p><b>Dominant fuels used for cooking and space heating???:</b></p> <p><b>Impact: ???</b></p> <p><b>Others???:</b></p> <ul style="list-style-type: none"> <li>• Burning traditional Arabian incense can have considerable detrimental effects on indoor air quality</li> </ul>	<p><b>Indoor air pollution regulated:</b> <i>(Yes / No) ???</i></p> <p><b>Promotion of non-grid / grid electrification: ???</b></p> <p><b>Promotion of cleaner cooking fuels and clean cook stoves: ???</b></p> <p><b>Other actions to reduce indoor biomass burning, or to reduce its emissions???:</b></p>

<sup>2</sup> 'Market Information - U.S.-Saudi Arabian Business Council.'