

## Syrian Arab Republic Air Quality Overview

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).

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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"> <li>● Air quality in Syrian urban areas falls below established national air quality standards, especially during winter when the demand for heating is high.</li> <li>● Pm<sub>10</sub> reach to a height level especially during dust storms which had acceded at last years.</li> <li>● WHO estimates that outdoor air pollution causes 200 premature deaths annually<sup>1</sup></li> </ul> <p>Air quality monitoring system: Before 2011 Syria had a monitoring system, There were air quality monitoring stations distributed on the most governorates. Due to the current circumstances most of them need maintenance, some of them damaged, others destroyed.</p>	<p>National Ambient air quality standards: Ambient air quality standards has updated in 2011.</p> <p>National Air Quality Policy:</p> <ul style="list-style-type: none"> <li>- National committee to improve air quality has been formed .</li> <li>- Project matrix was adopted, projects varied in several sectors: Clean energy, increase green areas, forestry expansion, expand using public transportation.</li> <li>- suitable budget and suitable circumstances is needed for projects implementation</li> </ul> <p>Air Quality legislation / programmes: Air quality covered within Environment Law No. 12 of 2012</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"> <li>● Air pollution from industrial installations emanates from the following: :</li> </ul>	<p>Emission regulations for industries: limits of emissions at source adopted in 2002.</p> <p>Small installation's emissions regulated: (Yes/No )No</p>

<sup>1</sup>WHO, 'WHO | Country Profiles of Environmental Burden of Disease', WHO, 2008  
[http://www.who.int/quantifying\\_ehimpacts/national/countryprofile/en/#T](http://www.who.int/quantifying_ehimpacts/national/countryprofile/en/#T).

	<p>Cement plants, quarries, asphalt mixing plants, fertilizers manufacturing, energy stations.. among others</p> <p>GDP of country: at constant price of 2000 1469703 million SP in 2010</p> <p>Industries' share of GDP 24 % in 2010</p> <p>Electricity sources: 94% of the installed electricity generating capacity (49037 million KWh in 2011) is generated from fossil fuel, 0% from nuclear, 6% from hydroelectric plants<sup>2</sup></p> <p>Others</p>	<p>Renewable energy investment promoted: private sector can sell electricity which generated by renewable energy and connected to distribution network</p> <p>Energy efficiency incentives: (<i>ex: Subsidies, labelling, rebates etc</i>) Label energy law 9/3/2015</p> <p>Incentives for clean production and installation of pollution prevention technologies: 50% of customs fees exemption for imported equipments that prevent pollution</p> <p>Actions to ensure compliance with regulations: (<i>monitoring, enforcement, fines etc</i>): There are campaigns of environmental inspections for industrial facilities. Fines has imposed under environmental law No 12.</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>) Solar heater supporting fund has established, 50% of value is offered.</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"> <li>● The number of cars in Syria has more than doubled since 2004</li> <li>● Syria also suffers from inadequate public transport provision, poor infrastructure and the absence of suitable traffic management systems</li> <li>● Number of cars in Syria have increased threefold in ten years (2001-2011).</li> <li>● After 2011 infrastructure in hot spots had destroyed</li> </ul>	<p>Vehicle emission limit: <i>-(Euro rating) None</i></p> <p>Fuel Sulphur content: 6500 (in ppm) diesel</p> <p>Fuel Lead content: All vehicles use lead free gasoline</p> <p>Restriction on used car importation: Motivate replacing old cars with new ones less emission with Decree No. 60 of 2001 which included reduction of customs duties by 50% on the cars which are going to be replaced with cars manufactured before 1974</p> <p>Actions to expand, improve and promote public transport and mass transit: In 2011 there were a project to import 1000 bus running on natural gas CNG in Damascus, and establishment of three stations for gas supply. Project had postponed due to the current circumstances.</p> <p>Actions to promote non-motorized transport: (<i>ex: include sidewalks and bike lanes in new road projects, car-free areas etc</i>) There were a project to use electric vehicles within the</p>

<sup>2</sup>'Countries of the World - 32 Years of CIA World Fact Books'.

		limits of the old city in Damascus, and turn old city to pedestrian city, and electric cars, and prevent entrance of normal cars and buses. Project had postponed due to the current circumstances.
REDUCE EMISSIONS FROM OPEN BURNING: OUTDOOR	<p>Outdoor, open burning: <i>(ex: is it commonly done? burning what kinds of wastes? etc)</i></p> <p>1. Because of the current circumstances, waste random burning increased .</p> <p>2. Armed terrorist groups attacked wells of oil and lines which concentrated in the eastern region, which include most of Syrian oil fields.</p> <p>Large amounts of oil are extracted illegally to be sold outside Syrian lands .</p> <p>Serious results of random refining processes seem less than its real size on all levels, and may exceed local boundaries and cause real problems (locally / globally).</p> <p>As a result of random refining oil: Ambient air became saturated with vapours and toxic gases.</p>	<p>Legal framework: <i>(ex: is burning banned?)</i> law 49 of 2004</p> <p>Actions to prevent open burning of municipal waste and / or agricultural waste: Integrated management for solid waste had adopted, but it had postponed due to the current circumstances</p>
REDUCE EMISSIONS FROM OPEN BURNING: INDOOR	<p>Dominant fuels used for cooking and space heating: Liquefied Petroleum Gas is used for cooking. Diesel fuel and firewood for space heating.</p> <p>Impact:</p> <ul style="list-style-type: none"> <li>● WHO estimates that indoor air pollution causes 100 premature deaths annually<sup>3</sup></li> </ul>	<p>Indoor air pollution regulated: <i>(Yes / No)</i> yes</p> <p>Promotion of non-grid / grid electrification: ???</p> <p>Promotion of cleaner cooking fuels and clean cook stoves: Set up and operate 100 Solar Stoves in some villages.</p> <p>Other actions to reduce indoor biomass burning, or to reduce its emissions: set up and operate 100 biogas units in some villages.</p>

<sup>3</sup>WHO, 'WHO | Country Profiles of Environmental Burden of Disease', WHO, 2008  
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