

United Arab Emirates 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.

United Arab Emirates 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"> • WHO estimates that air pollution causes 200 premature deaths annually¹ 	<p>National Ambient air quality standards: ???</p> <p>National Air Quality Policy: ???</p> <p>Air Quality legislation / programmes: ???</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"> • Air pollution from industrial installations emanates from the following: petroleum and petrochemicals, aluminium, cement, fertilizers, commercial ship repair, construction materials among others, with petroleum being the most important sources. <p>GDP of country: USD 390B in 2013²</p> <p>Industries' share of GDP: 61.1%</p> <p>Electricity sources:</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 Emirates Authority for Standardization and Metrology (ESMA) is gradually introducing a mandatory efficiency rating and labelling system to help consumers make resource-efficient choices <p>Incentives for clean production and installation of pollution prevention technologies: ???</p> <p>Actions to ensure compliance with regulations: (monitoring, enforcement, fines etc) ???</p> <p>Other actions at national, sub-national and / or local level to reduce industrial</p>

¹ WHO, 'WHO | Country Profiles of Environmental Burden of Disease', WHO, 2008 <http://www.who.int/quantifying_ehimpacts/national/countryprofile/en/#T>.

² 'Countries of the World - 32 Years of CIA World Fact Books', 2015 <<http://www.theodora.com/wfb/#R>>.

	<ul style="list-style-type: none"> • The energy sector is the leading source of air pollutants • 100% of the installed electricity generating capacity (23.25 million KW in 2010) is generated from fossil fuel. • The industrial sector contributes over half to the primary energy consumption. <p>Others</p> <ul style="list-style-type: none"> • Industrial emissions are the most important emission sources of PM, VOCs and SO2 • Industry contributes of GDP, which stood at • The oil and gas industry accounts for more than 25% of the GDP • Booming economic growth across the U.A.E. has led to massive increases in the demand for electricity. Current estimates suggest that the domestic demand will more than double by 2020. • A study examined the impact of thermal bridging effect on the building's energy consumption, and found that appropriate external wall insulation strategies alone can save up to 30% of energy³. 	<p>emissions: <i>(can include incentives to move industries to less populated areas here) ???</i></p> <ul style="list-style-type: none"> • The UAE has succeeded in radically reducing flaring of natural gas from the oil and gas industry since the 1990s and its policy is shifting from minimal flaring to zero-tolerance. The Abu Dhabi National Oil Company (ADNOC) group aims to eliminate routine flaring and had reduced flaring by 76.4% in 2013 compared to 1995 levels. • Kuwait aims for 5% of total electricity supply from renewable energy by 2020. • Dubai Aluminum (Dubal) and Emirates Aluminum (Emal), which were merged into Emirates Global Aluminum (EGA) in 2013, introduced a co-generation and combined cycle configuration in their power stations, achieving 46-48% thermal efficiency
<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 in UAE relies heavily on roads, with use of private cars being the most dominant mode of transport. • Vehicle exhaust emissions are the next biggest 	<p>Vehicle emission limit: <i>(Euro rating)</i> verify</p> <ul style="list-style-type: none"> • Vehicle emission standards exists • Vehicle emission strictly enforced during licensing <p>Fuel Sulphur content: <i>(in ppm):</i></p> <ul style="list-style-type: none"> • Diesel sulphur content is regulated at 5000ppm, but the dominant diesel in the market has a sulphur content of 50 and 350ppm⁶ <p>Fuel Lead content: All vehicles use lead free gasoline.</p>

³ 'Reegle - Clean Energy Information Gateway', *Reegle - Clean Energy Information Gateway* <<http://www.reegle.info>> [accessed 22 September 2015].

	<p>contributor to the air emissions in the UAE</p> <ul style="list-style-type: none"> ● Use of private cars is encouraged as demonstrated by the low fuel cost which stood at USD 0.58 per litre in 2015⁴. ● Public transport is dominated by bus routes and city trams. ● Plans exits to expand public transport to include, trams and city metros within and between the major cities. ● Private car ownership is high with 313 cars per 1000 individuals in 2007⁵ 	<p>Restriction on used car importation:</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> <p>Other transport-related actions:</p> <ul style="list-style-type: none"> ● To cope with the ever-rising traffic volume and road congestion in Dubai, the Salik toll collection system was rolled out in 2007. ● In October 2013, car-pooling was legalized with conditions in Dubai to increase vehicle occupancy rates.
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>Legal framework: <i>(ex: is burning banned?) ???</i></p> <p>Actions to prevent open burning of municipal waste and / or agricultural waste: ???</p>
REDUCE EMISSIONS FROM OPEN BURNING: INDOOR	<p>Dominant fuels used for cooking and space heating: ???</p> <p>Impact: ???</p>	<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>

⁶ UNEP, 'UNEP - Transport - Partnership for Clean Fuels and Vehicles', 2015 <<http://www.unep.org/transport/new/pcfiv/>> [accessed 28 September 2015].

⁴ 'Gasoline Prices around the World, 28-Sep-2015 | GlobalPetrolPrices.com' <http://www.globalpetrolprices.com/gasoline_prices/> [accessed 5 October 2015].

⁵ World Bank, *Worldwide Total Motor Vehicles (per 1,000 People)*, 2011 <<http://chartsbin.com/view/1114>> [accessed 30 June 2015].