Yemen 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.

Yemen Air Quality Policy Matrix		
Goals	**Status**	**Current Policies & Programmes**
GENERAL OVERVIEW	**Overall situation with respect to air quality in the country, including key air quality challenges**: ● Air pollution in Yemen is caused by a variety of factors, including emissions from vehicles , power plants and the widespread use of heavy construction tools such as industrial saws. ● The main source of air pollution, however, particularly in cities such as Sana'a, is emissions from cars and other vehicles. ● Another source of air pollution in Yemen , particularly around it's coastal areas, is the oil industry. ● Urbanisation, desalination plants , mining , quarrying are all responsible for worsening air pollution in Yemen. ● WHO estimates that outdoor air pollution causes 1100 premature deaths annually[1] **Air quality monitoring system**: **???** ●	**National Ambient air quality standards**: **???** **National Air Quality Policy**: **???** **Air Quality legislation / programmes**: **???** **Other**: **???**

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

REDUCE EMISSIONS FROM INDUSTRIES	**Industries that have the potential to impact air quality**: • Air pollution from industrial installations emanates from the following: crude oil production and petroleum refining; small-scale production of cotton textiles, leather goods; food processing; handicrafts; aluminium products; cement; commercial ship repair; natural gas production among others **GDP of country**: USD 43.89B in 2013[2] **Industries' share of GDP**: 30.9%[3] **Electricity sources**: • 100% of the installed electricity generating capacity (1.53 million KW in 2010) is generated from fossil fuel[4] **Others** •	**Emission regulations for industries**: **Small installation's emissions regulated**: *(Yes/No)* **???** **Renewable energy investment promoted**: • The aim of government policy on renewable energy is to increase the share of renewable energy in electricity generation to 15–20 per cent by 2025; **Energy efficiency incentives:** *(ex: Subsidies, labelling, rebates etc)* • In 2009, the government approved the National Strategy for Renewable Energy and Energy Efficiency which targets a 15% increase of energy efficiency in the power sector by 2025 **Incentives for clean production and installation of pollution prevention technologies**: **???** **Actions to ensure compliance with regulations:** *(monitoring, enforcement, fines etc)* **???** • **Other actions at national, sub-national and / or local level to reduce industrial emissions**: *(can include incentives to move industries to less populated areas here)* **???**
REDUCE EMISSIONS FROM TRANSPORT	**Key transport-related air quality challenges**: *(ex: vehicle growth, old fleet, dirty fuel, poor public transport etc)* • Vehicle emissions are a major source of PM, NO2 and CO • Public transport is dominated by state owned busses • In Sana'a there are more than 300,000 vehicles, many of which are very old. • The majority of these vehicles use leaded gasoline or local diesel, which contains a high	**Vehicle emission limit**: *(Euro rating)* **Fuel Sulphur content**: *(in ppm)* **Fuel Lead content:** All vehicles use lead free gasoline **Restriction on used car importation**: **???** **Actions to expand, improve and promote public transport and mass transit**: **???** **Actions to promote non-motorized transport**: *(ex: include sidewalks and bike lanes in new road projects, car-free areas etc)* **???**

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

	level of impurities. ● Airborne lead is one of the most serious urban air pollutants in Yemen. ● The annual economic cost of air pollution in Sana'a is estimated at around US$ 100 million. ● The use of lead in gasoline is the prime source of airborne lead pollution in Yemen ● Private car ownership is low with 215 car per 1000 individuals in 2007[5]	
REDUCE EMISSIONS FROM OPEN BURNING: OUTDOOR	**Outdoor, open burning**: *(ex: is it commonly done? burning what kinds of wastes? etc*) **???**	**Legal framework***: (ex: is burning banned?)* **???** **Actions to prevent open burning of municipal waste and / or agricultural waste**: **???**
REDUCE EMISSIONS FROM OPEN BURNING: INDOOR	**Dominant fuels used for cooking and space heating**: **???** **Impact**: ● Indoor air pollution causes an estimated 6,700 premature deaths every year	**Indoor air pollution regulated**: *(Yes / No)* **???** **Promotion of non-grid / grid electrification**: ● Of the 72% of the Yemeni population living in rural areas, only 42% have any access to electricity, compared to 92% of the urban population. **Promotion of cleaner cooking fuels and clean cook stoves**: **???** **Other actions to reduce indoor biomass burning, or to reduce its emissions**: **???**

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