

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.

IRAN, ISLAMIC REPUBLIC OF		
GOALS	CURRENT STATUS	CURRENT / PLANNED POLICIES & PROGRAMMES
GENERAL OVERVIEW	<ul style="list-style-type: none"> ● Overall situation with respect to air quality in the country, including key air quality challenges: Air pollution is one of the biggest environmental problem that Iran currently faces especially in the capital city of Tehran and other major cities ● 4 of the 10 worst polluted cities in the world are in Iran, and the worst polluted city is Ahvaz (small industrial city in Iran), which has three times the concentrations of pollution as Beijing (WHO) ● About 1.5 million tons of pollutants are produced in Tehran annually, with carbon monoxide from car exhaust making up a large percentage of these pollutants; In the capital city, topography worsens air pollution, especially during cold and calm nights; ● Traffic congestion is one of the main contributors to air pollution in large cities ● In 2013, an estimated 2,722 people (and as many as 4,460 according to the Health Ministry) have died in Tehran due to severe air pollution ● Sanctions aggravated the issue by forcing Iran 	<ul style="list-style-type: none"> ● National Ambient air quality standards: SO2 and NO2 standards do not meet WHO guidelines or Interim Targets; there is a standard for Suspended Particulate Matter but none for PM10 or PM2.5 ● National Air Quality Policy: Clean Air Act (1995) classifies 3 air pollution sources – motor vehicles; factories and power plants; businesses and domestic ● Air Quality legislation / programmes: Laws, regulations and standards are in place, but implementation, oversight and enforcement are not as effective as they could be; in 2013, the country ranked 144 in perceived corruption by Transparency International ● Other: Environmental Protection Organization has very little jurisdictional power, and is ineffective in enforcing regulations

	<p>to use outdated equipment and produce poor quality fuel; however they are not to blame for the overall situation</p> <ul style="list-style-type: none"> ● Air quality monitoring system: Air quality is monitored by a sophisticated national air quality monitoring network 	
REDUCE EMISSIONS FROM INDUSTRIES	<ul style="list-style-type: none"> ● Industries that have the potential to impact air quality: petroleum, petrochemicals, fertilizers, caustic soda, energy, power, cement, metal fabrication ● Industries responsible for up to 23% PM emissions in Tehran, and 15% of overall air pollution ● GDP of country: \$415 billion ● Industries' share of GDP: 41% ● Electricity sources: oil (27%), gas (67%), hydro (5%) ● Heavy energy subsidies have contributed to inordinately high fuel use 	<ul style="list-style-type: none"> ● Emission regulations for industries: ??? ● Small installation's emissions regulated: (Yes/No) ??? ● Renewable energy investment promoted: In 2011 a plan was adopted to increase the capacity of wind and solar generated electricity, and includes a feed-in tariff ● Energy efficiency incentives: (ex: Subsidies, labelling, rebates etc) ??? ● Incentives for clean production and installation of pollution prevention technologies: ??? ● Actions to ensure compliance with regulations: (monitoring, enforcement, fines etc) Inconsistencies in enforcing standards and regulations; industries are required to install on-line monitoring systems on exhausts ● Other actions at national, sub-national and / or local level to reduce industry emissions: ???
REDUCE EMISSIONS FROM TRANSPORT	<ul style="list-style-type: none"> ● Key transport-related air quality challenges: Only 40% of people in Tehran use public transport, while 60% use their personal cars ● Increased vehicle population, especially in Tehran, leads to gridlock and increased emissions ● Almost 75% of Tehran's air pollution comes from vehicles; 1/3 vehicles are over 20 years old ● Some of the public buses use CNG and some taxis use LPG (particularly in Tehran) ● Tehran Metro is a rapid transit system using electricity 	<ul style="list-style-type: none"> ● Vehicle emission limit: Euro 4 for light-duty vehicles was planned for some time in mid-2013; plans for Euro 3 standard for heavy duty vehicles ● Fuel Sulphur content: (in ppm) ??? ● In several cities, including Tehran, 50ppm gasoline is available ● Restriction on used car importation: vehicles older than three years are banned ● Actions to expand, improve and promote public transport and mass transit: Plans to expand Tehran Metro from its current 152km to 430km by 2028 ● Actions to promote non-motorized transport: (ex: include sidewalks and bike lanes in new road projects, car-free areas etc) ??? ● Other transport-related actions: Starting to phase-out vehicles older than 20 years

<p>REDUCE EMISSIONS FROM OPEN BURNING OF AGRICULTURAL / MUNICIPAL WASTE (OUTDOOR)</p>	<ul style="list-style-type: none"> ● Outdoor, open burning: Burning of agricultural waste does happen 	<ul style="list-style-type: none"> ● Legal framework: (ex: is burning banned?) ??? ● Actions to prevent open burning of municipal waste and / or agricultural waste: ???
<p>REDUCE EMISSIONS FROM OPEN BURNING OF BIOMASS (INDOOR)</p>	<ul style="list-style-type: none"> ● Dominant fuels used for cooking and space heating: <5% use solid fuels nationally; 40% of domestic requirements of the rural population is covered by animal wastes, wood ● Impact: 300 deaths/year from indoor air pollution (9,100 from outdoor air pollution) 	<ul style="list-style-type: none"> ● Indoor air pollution regulated: (Yes / No) ??? ● Promotion of non-grid / grid electrification: >99% electrification rate nationally; nearly 100% urban and 92% rural dwellings have electricity ● Promotion of cleaner cooking fuels and clean cook stoves: ● Other actions to reduce indoor biomass burning, or to reduce its emissions:

Secondary Sources used in the research: <http://airlex.web.ua.pt/pm10>, http://www.who.int/quantifying_ehimpacts/national/countryprofile/en/#I, http://www.unep.org/Transport/New/PCFV/pdf/Maps_Matrices/AP/matrix/AP_Matrix_June2015.pdf, https://energypedia.info/wiki/Main_Page, <http://www.reegle.info/countries/>, http://www.ess.co.at/WEBAIR/TEHRAN/PUBS/AQ_management_Tehran.pdf, https://en.wikipedia.org/wiki/Tehran_Metro, <http://www.newsweek.com/2014/03/28/choking-death-tehran-248027.html>, <http://www.theguardian.com/world/iran-blog/2014/mar/10/irans-government-steps-up-efforts-to-tackle-pollution>, http://www.nanoparticles.ch/2015_ETH-NPC-19/Presentations/08a-3_Mathies_Karsten_TUEV_Sued_Germany.pdf, <http://air.tehran.ir/portals/0/EUPE/pdfFiles/14.pdf>, <http://www.japanesecartrade.com/jctjapanicar/iran/import-procedure>, http://cleanairasia.org/wp-content/uploads/portal/files/agenda/meeting_report_of_consultation_for_joint_forum_and_5th_govt_meeting_feb2015.pdf