

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.

PAKISTAN		
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: South Asia's most urbanised country, Pakistan has among the world's most severe urban air pollution due to emissions from vehicles (transport PM linked to high morbidity and mortality); biomass burning; coal combustion; industrial emissions ● Limited financial, human and technical resources; weak regulatory framework; and lack of enforcement ● Air quality monitoring system: Yes, but no longer operational due to lack of maintenance 	<ul style="list-style-type: none"> ● National Ambient air quality standards: mostly meet WHO Interim Targets ● National Air Quality Policy: No – air is covered in the comprehensive framework provided by the Pakistan Environmental Protection Act, which provides prohibitions, penalties, enforcement to prevent and control pollution ● Air Quality legislation / programmes: Pakistan Clean Air Program provides list of interventions for improving air quality with respect to vehicles, industries, solid waste burning, natural dust ● Other: No specific unit responsible for air quality management; need for intergovernmental and inter-sectoral coordination; provincial environmental agencies responsible for most environmental issues, which could lead to significant differences across regions
REDUCE EMISSIONS FROM INDUSTRIES	<ul style="list-style-type: none"> ● Industries that have the potential to impact air quality: cement; fertilizer; sugar; steel (mills, foundries, scrap smelters, recycling); power plants; brick kilns; plastic molding ● Many factories use furnace oil high in Sulphur; others use waste for fuel, such as old tires, paper, wood, textile waste ● GDP of country: \$288 billion ● Industries' share of GDP: 21% ● Electricity sources: Oil (35%), gas (29%), 	<ul style="list-style-type: none"> ● Emission regulations for industries: Yes (http://serl.pk/lawfile/24/NEQs-industrial-gases.pdf). Emission standards are based on 1% Sulphur content in fuel oil, which is already very high; higher Sulphur content causes standards to be pro-rated, increasing emissions allowance ● Small installation's emissions regulated: (Yes/No) ??? ● Renewable energy investment promoted: Yes. No import duties on equipment and other tax benefits; Pakistan Council of Renewable Energy Technologies (Ministry of Science and Technology) to promote renewable energy through trainings, research, policy etc; Several wind power and solar power projects; Government has a target for 10% energy from renewable power plants but hasn't achieved the target yet; Punjab subsidises biogas and tube wells fitted with solar-powered pumps

	<p>hydro (29%)</p> <ul style="list-style-type: none"> ● Widespread use of small diesel generators in response to electricity outages ● “Other major obstacles include technical corruption, continuous increase in inflation, very limited financing from local banks, obsolete government management system and delayed decision-making, lack of renewable energy education and a weak electricity grid that needs urgently to be upgraded” (Pakistan's Renewable and Alternate Energy Association) 	<ul style="list-style-type: none"> ● Energy efficiency incentives: National Energy Conservation Centre is focal Federal Authority for initiating, catalyzing carrying out and coordinating the implementation of all energy conservation programs in all sectors of economy; energy efficiency standards and labelling for some products; Energy Efficiency & Conservation Bill 2014 ● Incentives for clean production and installation of pollution prevention technologies: SCI-Pak aims to develop a model for sustainable production through the implementation of a range of energy and resource recovery initiatives for small and medium sized enterprises ● Actions to ensure compliance with regulations: The Pollution Charge Rules 2001 provide formulas for paying pollution charges and clauses for escalation, but these rules were not implemented due to resistance from powerful lobbies; Emission data comes from a voluntary self-reporting program, but only a very small fraction of industrial facilities have registered their emissions ● Other actions at national, sub-national and / or local level to reduce industry emissions: ???
<p>REDUCE EMISSIONS FROM TRANSPORT</p>	<ul style="list-style-type: none"> ● Key transport-related air quality challenges: rapid vehicle growth; aging fleet in poor condition; many of the motorcycles and rickshaws have 2-stroke engines; adulterated fuel market thriving; Poor public transport ● 70% of rickshaws in Lahore are unregistered 	<ul style="list-style-type: none"> ● Vehicle emission limit: None ● Fuel Sulphur content: 500 ppm (could set 50ppm standard for imported products) ● Restriction on used car importation: import of used cars (maximum age of 3 years) is allowed only by Pakistanis living abroad who are returning home; however this policy is being massively abused by used car traders with the support of some customs appraisalment officers ● Actions to expand, improve and promote public transport and mass transit: new Bus Rapid Transit systems in Lahore and Islamabad (government subsidises ticket price), and under construction in Multan, and proposed for Faisalabad, Peshawar and Karachi ● Actions to promote non-motorized transport: (ex: include sidewalks and bike lanes in new road projects, car-free areas etc) ??? ● Other transport-related actions: No duties on small hybrid electric cars; however this saving is not being reflected in the price asked for by sales agents; Government initiatives to switch 2-stroke gasoline rickshaws to CNG; price differential between CNG and gasoline tariffs to promote CNG usage
<p>REDUCE EMISSIONS FROM OPEN BURNING OF</p>	<ul style="list-style-type: none"> ● Outdoor, open burning: burning of solid wastes and sugarcane fields is common practise 	<ul style="list-style-type: none"> ● Legal framework: (ex: is burning banned?) ??? ● Actions to prevent open burning of municipal waste and / or agricultural waste: ???

AGRICULTURAL / MUNICIPAL WASTE (OUTDOOR)		
REDUCE EMISSIONS FROM OPEN BURNING OF BIOMASS (INDOOR)	<ul style="list-style-type: none"> ● Dominant fuels used for cooking and space heating: 81% use solid fuel (wood, dung, agricultural waste) ● Impact: 56,100 deaths/ year from indoor air pollution (30,000 from outdoor air pollution) 	<ul style="list-style-type: none"> ● Indoor air pollution regulated: No ● Promotion of non-grid / grid electrification: Although the electrification rate is high (93%), reliability is not, as there are daily blackouts that can last all day ● Promotion of cleaner cooking fuels and clean cook stoves: Promoting LPG; Pakistan Council of Renewable Energy Technologies is developing solar cookers for mass dissemination ● Other actions to reduce indoor biomass burning, or to reduce its emissions: ???

Secondary Sources used in the research: <http://cleanairasia.org/portal/node/2155>, *Country Synthesis Report on Urban Air Quality Management: Pakistan. Asian Development Bank and the Clean Air Initiative for Asian Cities, 2006.*, <http://www.mocc.gov.pk/gop/index.php?q=aHR0cDovLzE5Mi4xNjguNzAuMTM2L21vY2xjL3VzZXJmaWxlczEvZmlsZS9NT0MvUHVibGljYXRpb25zJTlwb24lMjBfbnYIMjBhbmQIMjBDQy9BaXIIMjBQb2xsdXRpb24vQWlyJTlWUG9sbHV0aW9uLnBkZg%3D%3D>, http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2014/07/09/000442464_20140709123335/Rendered/PDF/890650PUB0Clea00Box385269B00PUBLIC0.pdf (Sanchez-Triana, Ernesto, Santiago Enriquez, Javaid Afzal, Akiko Nakagawa, and Asif Shuja Khan. 2014. *Cleaning Pakistan's Air: Policy Options to Address the Cost of Outdoor Air Pollution*. Washington, DC: World Bank. doi:10.1596/978-1-4648-0235-5. License: Creative Commons Attribution CC BY 3.0 IGO.), http://www.environment.gov.pk/eia_pdf/g_Legislation-NEQS.pdf, <http://pcret.net.au.net/about%20us.html>, <http://www.renewableenergyworld.com/articles/2015/01/pakistans-winds-blow-slow.html>, https://www.export-erneuerbare.de/EEE/Redaktion/DE/Downloads/Publikationen/Praesentationen/2015-06-10-intersolar-04-energy-ministry-pakistan.pdf?__blob=publicationFile&v=2, <http://www.trust.org/item/20130625141050-sw1nq/?source=spotlight>, <http://sci-pak.org/AboutSCIPak/tabid/73/Default.aspx>, <http://www.enercon.gov.pk/>, <http://www.dawn.com/news/1141645>, https://en.wikipedia.org/wiki/List_of_rapid_transit_systems_in_Pakistan, https://energypedia.info/wiki/Pakistan_Energy_Situation, <http://airlex.web.ua.pt/pm10>, http://www.unep.org/Transport/New/PCFV/pdf/Maps_Matrices/AP/matrix/AP_Matrix_June2015.pdf, http://www.who.int/quantifying_ehimpacts/national/countryprofile/pakistan.pdf?ua=1