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.

INDONESIA		
GOALS	**CURRENT STATUS**	**CURRENT / PLANNED POLICIES & PROGRAMMES**
GENERAL OVERVIEW	• **Overall situation with respect to air quality in the country, including key air quality challenges**: Air pollution is a significant issue, especially in urban areas; key issues are transport, poor fuel and vehicle standards, open burning of wastes, limited enforcement of regulations • **Air quality monitoring system**: Yes	• **National Ambient air quality standards**: PM10, PM2.5 meet WHO Interim Target 1. Ozone, SO2 and NO2 don't meet WHO Guidelines • **National Air Quality Policy**: ??? • **Air Quality legislation / programmes**: Government Regulation (PP) No. 41/1999 on Air Pollution Control specifies ambient air quality standards, emission standards for industrial activities and motor vehicles, and Pollutant Standard Index (PSI). Provincial governments can set regional vehicle emission standards, industrial emission standards, and ambient air quality standards that are more stringent than or at least equivalent to the national standards • **Other**:
REDUCE EMISSIONS FROM INDUSTRIES	• **Industries that have the potential to impact air quality**: Mining (coal, gold); Petroleum; Natural gas; Automobile manufacturing; Textiles; Cement • While some improvements have been made, there is no consolidated review of impacts; monitoring and enforcement may be insufficient; corruption is an issue • **GDP of country**: $870 billion • **Industries' share of GDP**: 47% • **Electricity sources**: Coal (42%); Gas (24%); Oil (21%); Hydro (13%)	• **Emission regulations for industries**: MoE Regulation No. 21/2008 concerning Emission Standard for Thermal Power Generation Activities requires thermal power plants to install a Continuous Emission Monitoring System (CEMS) and prepare an emission inventory for GHGs and air pollutants such as SO2, NOx and particulates emitted; Decree No. 13/1995 regarding the Emission Quality Standard for Fixed Sources: air emission standards for iron and steel, cement, pulp and paper, steam power plant, and similar large industries. Operators are obliged to provide their facilities with emission controls and the means to measure and test exhaust gas emissions. The results are to be reported to the local government with a copy to the Ministry of the Environment • **Small installation's emissions regulated**: ??? • **Renewable energy investment promoted**: Presidential Regulation No. 5/2006 concerning National Energy Policy sets the target for energy mix by 2025. Fossil oil to be reduced from 52% in 2003 to 26.2% in 2025, and hydropower from 3.8% to 2.4%. Geothermal to increase from

		3.1% to 3.8%, natural gas from 21.2% to 30.6%, coal from 19.7% to 32.7%, and renewable energy from 0.2% to 4.4%; Renewable Energy Feed-in Tariff issued in 2012 for biomass, biogas and municipal solid waste ● **Energy efficiency incentives:** National Energy Conservation Master Plan is binding on large energy users, but doesn't provide financial incentives, which is a barrier for medium to high cost energy efficiency investments; there is no labelling or minimum energy performance standards for appliances etc ● **Incentives for clean production and installation of pollution prevention technologies**: there is an institution to promote cleaner production; no incentives to install pollution prevention technology ● **Actions to ensure compliance with regulations:** (monitoring, enforcement, fines etc) ??? ● **Other actions at national, sub-national and / or local level to reduce industry**: ???
REDUCE EMISSIONS FROM TRANSPORT	● **Key transport-related air quality challenges**: 2005 Air Pollution Control bylaw and 2007 Regulation on emission tests not enforced (Jakarta); Increased growth in private vehicles; vehicle sales continues to grow steadily, impacting urban congestion and air pollution; Transport-related pollution exceeds WHO limits in Jakarta; poor quality fuel; low emission standards for vehicles	● **Vehicle emission limit**: Euro 2 ● **Fuel Sulphur content**: 3,500 ppm ● **Restriction on used car importation**: Banned ● **Actions to expand, improve and promote public transport and mass transit**: Transjakarta Busway in Jakarta, but complaints about convenience, safety and speed; limited investment in public transport; many buses +30 years old; high tax on public transport vehicles discourages replacement (20% tax on public transport vehicle; 10% tax on private vehicle); Increasing investment in rail network for passengers and freight ● **Actions to promote non-motorized transport**: (ex: include sidewalks and bike lanes in new road projects, car-free areas etc) ??? ● **Other transport-related actions**: Promoting electric vehicles by funding 5 universities to create prototypes; government committed to creating an electric "national car"; Low-Cost Green Car initiative – lower tax rate for cleaner cars; Scrappage of old, two-stroke three-wheelers (bajaj) in Jakarta, replaced by new compressed natural gas (CNG) three-wheelers; slow progress as tax regime doesn't favour environmentally sustainable or energy efficient vehicles – high taxation for CNG bajaj (45% customs office tax, 10% luxury tax)
REDUCE EMISSIONS FROM OPEN	● **Outdoor, open burning**: key issue, as 35% waste is managed through open burning; Burning to prepare agricultural land is a	● **Legal framework**: open burning of waste is prohibited; 1999 Forestry Law prohibits all forms of land clearing by burning, but weak enforcement means that the ban is largely ignored. Particulates from forest fires lit by farmers are a serious problem

BURNING OF AGRICULTURAL / MUNICIPAL WASTE (OUTDOOR)	serious issue within the region and a significant contributor to haze	• **Actions to prevent open burning of municipal waste and / or agricultural waste**: Jakarta is in early stages of a "waste to energy" programme
REDUCE EMISSIONS FROM OPEN BURNING OF BIOMASS (INDOOR)	• **Dominant fuels used for cooking and space heating**: 40% rely on biomass, especially wood • **Impact**: WHO estimates 45,000 deaths/year from indoor air pollution (32,300 for outdoor air pollution)	• **Indoor air pollution regulated**: No • **Promotion of non-grid / grid electrification**: there is a programme to expand electrification rate from 84% to 99% by 2020 • **Promotion of cleaner cooking fuels and clean cook stoves**: Kerosene-to-Liquefied Petroleum Gas Conversion Programme has helped, but limited impact in poorer rural areas • **Other actions to reduce indoor biomass burning, or to reduce its emissions**: ???

Secondary Sources used in the research:
http://www.egcfe.ewg.apec.org/publications/proceedings/CleanerCoal/HaLong_2008/Day%201%20Session%201A%20-%20Sigit%20Reliantoro%20Proposed%20Emission%20Standa.pdf, http://www.iea.org/publications/freepublications/publication/indonesia2008.pdf, http://www.indonesia-investments.com/culture/economy/general-economic-outline/industry/item379, http://aperc.ieej.or.jp/file/2013/7/23/PREE_201206_Indonesia.pdf, http://www.thejakartapost.com/news/2013/06/10/air-pollution-city-reaches-alarming-level.html, http://cleantechnica.com/2015/04/22/indonesia-planning-create-electric-national-cars/, http://www.railjournal.com/index.php/financial/public-or-private-indonesias-recipe-for-investment.html, http://thejakartaglobe.beritasatu.com/opinion/commentary/fixing-indonesias-public-transport-woes/, http://www.climatecentral.org/news/where-trash-is-a-burning-problem-17973, http://documents.worldbank.org/curated/en/2013/06/17965911/indonesia-toward-universal-access-clean-cooking, http://en.tempo.co/read/news/2015/01/21/056636542/Govt-Targets-99-Percent-Electrification-Rate, https://energypedia.info/wiki/Indonesia_Energy_Situation, http://www.who.int/quantifying_ehimpacts/national/countryprofile/en/#I