

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.

VIET NAM		
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: 98% of the population is exposed to PM2.5 at levels exceeding WHO guidelines, amongst the worst in terms of air pollution exposure; Traffic is responsible for up to 70% air pollution ● Air quality monitoring system: 	<ul style="list-style-type: none"> ● National Ambient air quality standards: They are within WHO Interim Targets or meet WHO recommended standards ● National Air Quality Policy: Planning to develop a Law on Clean Air ● Air Quality legislation / programmes: The Decree on Air Pollution Charge in Viet Nam; Air pollution control identified as one of the 19 priority areas in the Oriented Strategy for Sustainable Development (Viet Nam Agenda 21) ● Other: JICA-supported AQ management project (2013-2015) to enhance institutional capacity
REDUCE EMISSIONS FROM INDUSTRIES	<ul style="list-style-type: none"> ● Industries that have the potential to impact air quality: construction, thermo-electric power, cement factories, glass factories, mining, paper mills, steel manufacturing ● GDP of country: \$171 billion ● Industries' share of GDP: 38% ● Electricity sources: hydro (40%), thermal gas turbine (33%), coal (22%), petroleum 	<ul style="list-style-type: none"> ● Emission regulations for industries: National standards to control industrial emissions. The allowable emission limits will be calculated specifically for each plant depending on its location; PM2.5 not regulated ● Small installation's emissions regulated: (Yes/No) ??? ● Renewable energy investment promoted: National Energy Development Strategy sets targets to increase share of renewable energy, provides incentives to investors, but beneficial to small hydro projects only ● Energy efficiency incentives: legislation to implement Minimum Energy Performance Standards (MEPS) for appliances and equipment alongside a program of Energy Labelling; Vietnam National Energy Efficiency Program (VNEEP) for the period 2005-2015; Law on Energy Saving and Efficiency ● Incentives for clean production and installation of pollution prevention technologies: Viet Nam Cleaner Production Centre has a number of government ministries on the Board (http://vncpc.org/en/); various programmes (World Bank, IFC) with some moderate success

		<ul style="list-style-type: none"> ● Actions to ensure compliance with regulations: (monitoring, enforcement, fines etc) ??? ● Other actions at national, sub-national and / or local level to reduce industry: Investment Law 2015 provides incentives for certain industries that set up / expand in rural areas
REDUCE EMISSIONS FROM TRANSPORT	<ul style="list-style-type: none"> ● Key transport-related air quality challenges: poor fuel and vehicle standards, rapid growth; traffic is responsible for 70% air pollution, 95% volatile organic compounds ● In 2018, Viet Nam will have to forgo import duties for vehicles from within ASEAN, making it harder to control vehicles ● Electric cars are yet to be regulated under the Road Traffic Law 	<ul style="list-style-type: none"> ● Vehicle emission limit: Euro 2 (Euro 4 in 2017) ● Fuel Sulphur content: 500 ppm (50ppm in 2018) ● Restriction on used car importation: None ● Actions to expand, improve and promote public transport and mass transit: : a metro rail project in Hanoi; rapid transit network being built in Ho Chi Minh; Public transport development policies approved this year, encouraging bus companies to develop public transport bus services and subsidize passengers' fares. Bus enterprises to receive tax exemptions on imported automobile parts, and exemption from paying ownership fees if their buses use clean energy. Subway system being built ● Actions to promote non-motorized transport: (ex: include sidewalks and bike lanes in new road projects, car-free areas etc) more sidewalks being built ● Other transport-related actions: changing some school and work hours to manage traffic peaks; park-and-ride schemes being considered
REDUCE EMISSIONS FROM OPEN BURNING OF AGRICULTURAL / MUNICIPAL WASTE (OUTDOOR)	<ul style="list-style-type: none"> ● Outdoor, open burning: burning of wastes is common ● Most municipal wastes not safely managed; industrial hazardous wastes inadequately managed; Inadequate equipment, training, capacity, implementation, supervision, enforcement; Limited incentives for proper waste management 	<ul style="list-style-type: none"> ● Legal framework: Sound legal framework (see http://www.unep.org/ietc/Portals/136/Events/ISWM%20GPWM%20Asia%20Pacific%20Workshop/Vietnam_Presentation.pdf for details on policies) ● Actions to prevent open burning of municipal waste and / or agricultural waste: New strategies have promoted investment in waste management and developing a network of service providers (formal, informal)
REDUCE EMISSIONS FROM OPEN BURNING OF BIOMASS (INDOOR)	<ul style="list-style-type: none"> ● Dominant fuels used for cooking and space heating: 46% rely on solid fuels (share of biomass vs other sources) ● Impact: WHO estimates 23,800 deaths/year from indoor air pollution (6,700 for outdoor air pollution) 	<ul style="list-style-type: none"> ● Indoor air pollution regulated: No ● Promotion of non-grid / grid electrification: Rural Electrification Programme has resulted in 97% access ● Promotion of cleaner cooking fuels and clean cook stoves: No, due to lack of private sector to take research into the market

	• Other actions to reduce indoor biomass burning, or to reduce its emissions:
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Secondary Sources used in the research: <http://tuoitrenews.vn/features/482/vietnam-air-pollution-among-the-worst-in-the-world>, <http://www.vir.com.vn/air-quality-remains-a-headache.html>, <http://www.voanews.com/content/vietnam-curbing-traffic-to-improve-safety-air-quality/1843501.html>, *Clean Air Initiative for Asian Cities (CAI-Asia) Center, 2010. "Viet Nam: Air Quality Profile - 2010 Edition". Pasig City, Philippines.*, http://dangcongsan.vn/cpv/Modules/News_English/News_Detail_E.aspx?CN_ID=706550&CO_ID=30293, <http://www.energyrating.gov.au/about/other-programs/international-projects/vietnam-energy-efficiency-standards-and-labeling-program/>, http://www.afd.fr/webdav/site/afd/shared/FICHES_PAYS/02%20BP%20ENG%20Efficacité%20Energétique.pdf, <http://www.renewableenergy.org.vn/index.php?page=renewable-energy-in-vietnam>, <http://www.iea-coal.org.uk/documents/82577/7870/Vietnam> (national emission limits), <http://www.bdg-asia.com/vietnam-introduces-investment-law-in-july-2015-strategic-industries-and-rural-areas-offer-broad-range-of-incentives/>, <http://www.waste-viet.com/en/waste-management-vt/>, http://www.unep.org/ietc/Portals/136/Events/ISWM%20GPWM%20Asia%20Pacific%20Workshop/Vietnam_Presentation.pdf, <http://vietnam.vnanet.vn/english/public-transport-development-policies-approved/185601.html>, <https://openaccess.adb.org/bitstream/handle/11540/963/rural-electrification-vie.pdf?sequence=1>, https://energypedia.info/wiki/Vietnam_Energy_Situation, http://www.who.int/quantifying_ehimpacts/national/countryprofile/en/#1