

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.

NEW ZEALAND		
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: By world standards, New Zealand has relatively good air quality due to the coastal location of most of the main centres, the limited amount of heavy industry, the strong winds and distance from other sources of pollution. National indicators showed improvement of air quality from 2006 to 2012, and average national PM10 concentration fell by 8%; PM10 levels were the seventh lowest of 32 OECD countries in 2011 ● However at the local level, exceedances of national and international guidelines for some pollutants occurs in some urban areas (ex: Auckland with heavy traffic, Christchurch with temperature inversions) ● In 2012, six out of seven PM2.5 monitoring sites and 48 out of 55 PM10 monitoring sites met WHO long-term guideline ● Key sources: transport, home-heating (with wood, coal); industry can cause localised problems 	<ul style="list-style-type: none"> ● National Ambient air quality standards: O3 meets WHO Interim targets; PM10, NO2, SO2 meet WHO Guidelines; No PM2.5 standards, although reference is made to WHO standard ● National Air Quality Policy: The Clean Air Act 1972 was repealed by the Resource Management Act 1991 (RMA); RMA repealed 69 Acts and established one integrated framework that replaced the many previous resource-use regimes, which had been fragmented between agencies and sectors, such as land use, forestry, pollution, traffic, zoning, water and air.¹ ● Air Quality legislation / programmes: National Environmental Standards for Air Quality that include seven standards for dioxins and other toxic emissions (certain activities that discharge hazardous pollutants into the air, such as open burning of tyres, are banned), five standards for ambient (outdoor) air quality (setting maximum allowable levels of key pollutants), a design standard for new wood burners installed in urban areas, and a requirement for landfills over 1 million tonnes of refuse to collect greenhouse gas emissions ● Other: National environmental standards are mandatory regulations and automatically supersede controls by local government unless the local government controls are stricter

	<ul style="list-style-type: none"> ● Almost all breaches of the ambient PM10 standard occur during winter when domestic heating use is at its peak ● Air quality monitoring system: Yes 	
REDUCE EMISSIONS FROM INDUSTRIES	<ul style="list-style-type: none"> ● Industries that have the potential to impact air quality: petroleum extraction, refining, textiles, mining ● GDP of country: \$188 billion ● Industries' share of GDP: 19% ● Electricity sources: hydro (56%); thermal (natural gas, coal) (28%); geothermal, wind, solar, biogas (16%) ● 72% electricity produced from renewable sources – one of largest shares among OECD countries 	<ul style="list-style-type: none"> ● Emission regulations for industries: air-discharge permits are issued by regional councils ● Small installation's emissions regulated: (Yes/No) ??? ● Renewable energy investment promoted: National Policy Statement for Renewable Electricity Generation 2011 sets out objective and policies for renewable electricity generation, and requires all councils to make provisions for it in their plans; support schemes are available for solar, wind, hydro and biomaterial energy sources ● Energy efficiency incentives: (ex: Subsidies, labelling, rebates etc) Energy Efficiency and Conservation Act 2000, which lead to the country's first energy efficiency strategy and establishment of Energy Efficiency and Conservation Authority; implementation of smart metering in some cities; Energy Strategy 2011-2021 has goals to improve energy efficiency in transport, decrease energy intensity in business, improved energy efficiency in homes, increased uptake of energy efficient products ● Incentives for clean production and installation of pollution prevention technologies: ??? ● Actions to ensure compliance with regulations: (monitoring, enforcement, fines etc) an abatement notice may be serviced by an enforcement officer; the Environment Court can require activities to cease; the local authority can issue an Environmental Infringement Notice (instant fine) ● 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: Despite 11% increase in vehicle use, emissions from road transport fell 25% (PM10), 26% (PM2.5), 36% (NOx) and 49% (volatile organic compounds) from 2001 to 2012, due to improved fuels and vehicles ● Still an issue in peak traffic locations – Auckland has heavy traffic ● Average age of light duty fleet in 2010 was 	<ul style="list-style-type: none"> ● Vehicle emission limit: Euro 5 (light and heavy duty) ● Fuel Sulphur content: 10 ppm ● Restriction on used car importation: From 2012, vehicle must be manufactured to meet Euro 4 emission standard ● Actions to expand, improve and promote public transport and mass transit: Auckland is developing a new public transport network with integrated bus and electric train lines and increased frequency of service; large-scale bus and rail projects have resulted in an increased use

	<p>12.7 years, many of which enter the country as used ex-Japan vehicles (although number of used imports has declined since its peak in 2004)</p> <ul style="list-style-type: none"> ● 42% of imported vehicles in 2012 were second-hand, mainly from Japan 	<p>of public transport, increasing modal share to 1950s numbers with an associated improvement in subsidy efficiency (ex: subsidy totals rose 14% in 2008-2009, but led to 39% increase in distance travelled);</p> <ul style="list-style-type: none"> ● Actions to promote non-motorized transport: (ex: include sidewalks and bike lanes in new road projects, car-free areas etc) cycling is the fastest growing mode of transport in several cities and towns; In 2014, the Prime Minister announced \$100 million additional funding for the Urban Cycleways Programme, which aims to improve urban cycling infrastructure ● Other transport-related actions:
<p>REDUCE EMISSIONS FROM OPEN BURNING OF AGRICULTURAL / MUNICIPAL WASTE (OUTDOOR)</p>	<ul style="list-style-type: none"> ● Outdoor, open burning: (ex: is it commonly done? burning what kinds of wastes? etc) ??? 	<ul style="list-style-type: none"> ● Legal framework: Burning waste, tyres, bitumen, oil is 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 for cooking; 38% of all households burn wood or coal for home-heating – this is considered the main source of anthropogenic PM10 emissions from May to August (in some places, 90% of PM10) ● Impact: Negligible from indoor air pollution (294 deaths in 2010 from outdoor air pollution – in 2005, that figure was 220 deaths) 	<ul style="list-style-type: none"> ● Indoor air pollution regulated: (Yes / No) ● Promotion of non-grid / grid electrification: 100% electrification ● Promotion of cleaner cooking fuels and clean cook stoves: ??? ● Other actions to reduce indoor biomass burning, or to reduce its emissions: There are design and efficiency standards for wood burners installed in urban areas after September 2005

Secondary Sources used in the research: <http://airlex.web.ua.pt/pm10>, http://www.who.int/quantifying_ehimpacts/national/countryprofile/en/#1, 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.smh.com.au/federal-politics/political-news/air-pollution-takes-toll-on-australian-lives-economy-oecd-report-20140522-38rre.html>, <http://www.mfe.govt.nz/sites/default/files/air-domain-report-final.pdf>, <http://www.beehive.govt.nz/release/proposed-changes-vehicle-emissions-rules>, <http://www.transport.govt.nz/assets/Import/Documents/Light-vehicle-sector-report-aging-of-the-fleet-June-11.pdf>, <http://vehicleinspection.nzta.govt.nz/virms/entry-certification/i-and-c/exhaust/exhaust-emissions#np>, <http://www.aa.co.nz/cars/licensing-safety-fees/export-import-car/import-rules/>, <http://www.mfe.govt.nz/laws/standards/air-quality/index.html>, <http://www.teara.govt.nz/en/atmosphere/page-5>, <http://www.mfe.govt.nz/sites/default/files/2011-user-guide-nes-air->

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