Malta Air Quality Catalogue

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.

Goals	Status	Current Policies & Programmes
GENERAL OVERVIEW	Overall situation with respect to air quality in	National Ambient air quality standards: exists
	the country, including key air quality challenges:	• Complete harmonization of European Union and Maltese air quality legislation has been achieved
	• Traffic emissions, are the most important	National Air Quality Policy:
	sources of air pollutants in Malta	The National Air Quality Plan was revised in 2015; it is primarily targeting pollutants such
	Air quality monitoring system:	as PM10, with the aim to bring the daily averages in line with the thresholds present in
	Air quality is monitored at dozens of measuring points in various locations in Malta	Directive 2008/50/EC. However in 2011 the annual limit value for nitrogen dioxide (NO2) has been exceeded in the traffic site within the agglomeration. Therefore, these measures are also targeted to bring concentrations in this site in line with the annual limit value for NO2.
		The National Air Quality Plan has a wide range of future measures to be implemented, which are divided into short-term and medium-term measures; primarily they affect transport.
		• The EU air quality policy has a long term goal of achieving levels of air quality that do not result in unacceptable impacts on, and risks to, human health and the environment."
		• European Union air quality policy aims to;
		- Develop and implement appropriate instruments to improve air quality.
		- Control of emissions from mobile sources, through fuel quality improvement,
		- Promoting and integrating environmental protection requirements into the transport and energy sector are part of these aims.
		Air Quality legislation / programmes:

		 The Ambient Air Quality Regulations (Legal Notice 478 of 2010) transpose all the ambient air quality acquis into Maltese Legislation. The major aim of this Legal Notice in line with the aim of the Directives it transposes is to develop a long-term, strategic and integrated policy advice to protect against significant negative effects of air pollution on human health and the environment. Other: Presently, Malta has a National Strategy for Policy and Abatement Measures Relating to the Reduction of Greenhouse Gas Emissions. It is recognised that this Strategy requires substantial revisions, not only to expand the scope, but to also bring Malta's mitigation strategy in line with current and future commitments in respect of greenhouse gas emission limitation or reductions. Work has started to develop the Malta's Low Carbon Development Strategy (LCDS). A number of sectors are undertaking studies that will eventually feed into the LCDS, specifically with the aim of proposing plans and scenarios that would enable the determination of the most cost-effective manner to reach the country's current and future renewable energy, energy efficiency and greenhouse gas emission objectives for the energy sector and the better formulation and assessment of policy. The various initiatives under this measure will result in a reduction in greenhouse gas emission saving in Gg CO2 eq. estimate for 2020 as follows: interconnector + switch to natural gas (1107 Gg CO2 eq.); promotion of the use of biodiesel (30 Gg CO2 eq.); transport reform (40 Gg CO2 eq.); modernisation of agriculture holdings + Nitrates Action Programme (33 Gg CO2 eq.); gas management at non-hazardous landfills (50 Gg CO2 eq.).
REDUCE EMISSIONS FROM INDUSTRIES	Industries that have the potential to impact air quality: • Air pollution from industrial installations emanates from the following: tourism, electronics, ship building and repair, construction, food and tobacco among others	 Emission regulations for industries: The National Energy Efficiency Action Plan makes measures to curb industrial emissions; NEAPs allow MS of the EU to implement and review the Energy Efficiency Directive Draft National Environmental Technologies Action Plan may also have ramifications on industrial emissions Industrial emissions within the European Union are regulated under the Industrial Emissions Directive (IED), which was issued on 21 December 2007

- In terms of groups of air pollutants, inorganic substances and greenhouse gases have risen, other gases have dropped; and heavy metals show an increasing trend from 2004 to 2008 but a decreasing trend from 2008 to 2012.
- The releases of pollutants to air show maintained or decreasing trends from 2004 to 2012, some of them with increases from 2004 to 2008 and decreases from 2008 to 2012, e.g. Zn, Ni and PM10 releases dropped due to energy sector developments.

GDP of country: USD 9.54B in 2013¹ **Industries' share of GDP**: 25.3%²

Electricity sources:

Electricity sources available in 2015 include local conventional thermal generation capacity of 479MW (including backup), a 200MW HVAC interconnector with Sicily and circa 60MWp of photovoltaic panels. There are also a few small waste to energy plants.

Others ???

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- The directive's aim was to achieve significant benefits to the environment and human health by reducing harmful industrial emissions across the EU, in particular through better application of Best Available Techniques.
- The IED entered into force on 6 January 2011 and has to be transposed into national legislation by Member States by 7 January 2013.
- European legislation establishes air quality objectives (limit and target values) for the different pollutants. Limit values are concentrations that must not be exceeded in a given period of time.

Small installation's emissions regulated: (Yes/No) yes

Renewable energy investment promoted:

- Malta together with all other European Union member states have agreed on legally binding national targets for increasing the share of renewable energy, so as to achieve a 20 % share for the entire Union by 2020.
- Malta has on its part committed to a renewable energy share target of 10%. Renewable energy is promoted through grants paid against capital investment in domestic photovoltaic systems and feed-in tariffs.

Energy efficiency incentives: (ex: Subsidies, labelling, rebates etc)

- Energy efficiency measures target several sectors including households, transport, industry and services.
 - In the housing sector energy efficiency will be achieved predominantly promotion of energy saving appliances and lighting, and incentives towards the installation of double glazing, solar water heaters and roof insulation. In the transport sector this savings will be achieved through the promotion of public transport, upgrading of road infrastructure, promotion of electric and hybrid vehicles, and renewal of the island's ageing vehicle fleet to take advantage of more efficient and cleaner vehicles.

¹ 'Countries of the World - 32 Years of CIA World Fact Books', 2015 http://www.theodora.com/wfb/#R>.

² 'Countries of the World - 32 Years of CIA World Fact Books'.

		• In line with Article 8 of the Energy Efficiency Directive, Energy Audits were executed in the non-SMEs registered and operating in Malta. An action plan for voluntary agreements between the non-SMEs and the Sustainable Energy and Water Conservation Unit has been launched in order to appreciate the effort done by the non-SMEs and for the non-SMEs continue their energy saving exercise. Various schemes are planned to aid both SMEs and non-SMEs to improve their energy efficiency
		Incentives for clean production and installation of pollution prevention technologies: ???
		Actions to ensure compliance with regulations: (monitoring, enforcement, fines etc) ???
		• Other actions at national, sub-national and / or local level to reduce industrial emissions: (can include incentives to move industries to less populated areas here) ???
REDUCE	Key transport-related air quality challenges: (ex: vehicle growth, old fleet, dirty fuel, poor public transport etc)	Vehicle emission limit: (Euro rating)
EMISSIONS FROM TRANSPORT		 Emissions standards for vehicles correspond to Euro 6 for LDV vi HDV standards. European Union emission regulations for new light duty vehicles (passenger cars and light
TRANSPORT	Public transport is dominated by bus service	commercial vehicles) are specified in Regulation 715/2007 (Euro 5/6) [2899].
	Use of private cars is discouraged as demonstrated by the high fuel cost which stood USD 1.51 and live is 2015.	• Emission standards for light-duty vehicles are applicable to all vehicles not exceeding 2610 kg (Euro 5/6).
	at USD 1.51 per litre in 2015.Transport is among the most important source of air pollution	• EU regulations introduce different emission limits for <i>compression ignition</i> (diesel) a positive ignition (gasoline, NG, LPG, ethanol,) vehicles. Diesels have more stringer
	 Private car ownership is high with 709 cars per 1000 individuals in 2011³/592 per 1000 individuals in 2012⁴ 	standards but are allowed higher NOx. Positive ignition vehicles were exempted from PM standards through the Euro 4 stage. Euro 5/6 regulations introduce PM mass emission standards, equal to those for diesels, for positive ignition vehicles with direct injection engines.
	• Congestion via car dependence is a serious and costly problem for Malta. The cost of congestion	Fuel Sulphur content: (in ppm) • The 2000/2005 emission standards were accompanied by an introduction of more stringent fuel regulations that require "Sulphur-free" diesel and gasoline fuels (≤ 10 ppm S) must be

³ World Bank, 'Motor Vehicles (per 1,000 People) | Data | Table', 2014 http://web.archive.org/web/20140209114811/http://data.worldbank.org/indicator/IS.VEH.NVEH.P3 [accessed 25 September 2015]. ⁴ Eurostat 2014, http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tsdpc340&plugin=1

	is very high, with the external costs of air pollution alone estimated at 14.3 million euros. ⁵	mandatory from 2009. • Maximum allowable sulphur level in petrol and diesel fuels is 10ppm Fuel Lead content: All vehicles use lead free gasoline Restriction on used car importation: ???
		Actions to expand, improve and promote public transport and mass transit: The public transportation system is constantly being improved; recently more buses were added to the fleet, more routes added and made more efficient and awareness campaigns carried out.
		Actions to promote non-motorized transport: (ex: include sidewalks and bike lanes in new road projects, car-free areas etc) Malta has a scrappage scheme that allows for a 2000 euro grant on the scrapping of a 10-year old vehicle, which would go towards the purchase of a quadricycle. Malta also has plans for a car sharing system and a National Cycling Plan.
REDUCE	Outdoor, open burning: (ex: is it commonly	Legal framework: (ex: is burning banned?) ???
EMISSIONS FROM OPEN BURNING: OUTDOOR	done? burning what kinds of wastes? etc) ???	Actions to prevent open burning of municipal waste and / or agricultural waste: ???
REDUCE	Dominant fuels used for cooking and space	Indoor air pollution regulated: (Yes / No) ???
EMISSIONS FROM OPEN	heating: ???	Promotion of non-grid / grid electrification: ???
BURNING:	Impact: ???	Promotion of cleaner cooking fuels and clean cook stoves: ???
INDOOR		Other actions to reduce indoor biomass burning, or to reduce its emissions: ???

⁵ European Commission, University of Malta, 2014 https://ec.europa.eu/malta/sites/malta/files/docs/body/study on traffic online.pdf