Greece 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.

Greece Air Quality Policy Matrix		
Goals	**Status**	**Current Policies & Programmes**
GENERAL OVERVIEW	**Overall situation with respect to air quality in the country, including key air quality challenges**: ● There are two agglomerations, Athens and Thessaloniki. Especially the greater Athens area, like most metropolitan areas in the world, has air pollution problems. These problems are the result of high population density and the accumulation of major economic activities in the region, while the intense sunshine contributes to the high levels of photochemical air pollution especially during the summer months. The air pollution problems are often exacerbated by factors that favour the accumulation of air pollutants over the city, such as, topography (basin surrounded by mountains), narrow and deep street canyons and adverse meteorological conditions such as temperature inversions, low wind speed, high temperature, extensive periods of dryness etc . High levels of particulate matter occur in the whole territory. Saharan dust events often play a key role in the accumulation of PM_{10}. ● In the recent past, since the financial crisis, air pollution in Athens has been reported to be 15times higher than the EU recommended	**National Ambient air quality standards**: ● In complete harmonization with the European Union requirments. **National Air Quality Policy**: ● 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 Greek legislation on air pollution is in fully compliance with the EU requirements ● The control of air pollutants and the management of air quality is for the most part the same as the EU's practice. ● **Other**: ●

	concentration, this is driven by the increased burning of wood fuel for house heating ● WHO estimates that outdoor air pollution causes 2500 premature deaths annually[1] **Air quality monitoring system**: ● Air quality is measured by a sophisticated national air quality monitoring network. An Air Pollution Monitoring Network is operated thus implementing the relative EU Directives	
REDUCE EMISSIONS FROM INDUSTRIES	**Industries that have the potential to impact air quality**: ● Air pollution from industrial installations emanates from the following: tourism, food and tobacco processing, textiles, chemicals, metal products; mining, petroleum among others **GDP of country**: USD 243.3B in 2013[2] **Industries' share of GDP**: 16%[3] **Electricity sources**: ● 69.5% of the installed electricity generating capacity (15.12million KW in 2010) is generated from fossil fuel, 16.2.% from hydroelectric plants and the rest 10.5% is generated from other renewable sources[4] **Others**	**Emission regulations for industries**: ● Industrial emissions within the European Union are regulated under the Industrial Emissions Directive (IED), which was issued on 21 December 2007 ● 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**: ● Renewable energy policy in Greece is guided by EU requirements. ● The non-binding targets for 2010 for biofuels and electricity from renewable sources have been replaced by a binding target to increase the share of renewable energy in gross final energy consumption by 2020.

[1] WHO, 'WHO | Country Profiles of Environmental Burden of Disease', *WHO*, 2008 <http://www.who.int/quantifying_ehimpacts/national/countryprofile/en/#T>.
[2] 'Countries of the World - 32 Years of CIA World Fact Books', 2015 <http://www.theodora.com/wfb/#R>.
[3] 'Countries of the World - 32 Years of CIA World Fact Books'.
[4] 'Countries of the World - 32 Years of CIA World Fact Books'.

	•	• Under Directive 2009/28/EC9, Greece must increase this share from 6.9% in 2005 to 18% in 2020. The overall target for the EU is 20% by 2020. • The main instrument for the promotion of RES-E in Greece is a feed-in tariff. The mechanism is regulated according to law 3851/2010 article **Energy efficiency incentives:** *(ex: Subsidies, labelling, rebates etc)* **???** **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 EMISSIONS FROM TRANSPORT	**Key transport-related air quality challenges**: *(ex: vehicle growth, old fleet, dirty fuel, poor public transport etc)* • Greece has a large and a well-developed modern transport system comprising of busses, trains, metros, trams and taxis. • Use of private cars is discouraged as demonstrated by the high fuel cost which stood at USD 1.61 per litre in 2015[5]. • Private car ownership is high, with 537 cars per 1000 individuals in 2010[6] •	**Vehicle emission limit**: *(Euro rating)* • 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 commercial vehicles) are specified in Regulation 715/2007 (Euro 5/6) *[2899]*. • Emission standards for light-duty vehicles are applicable to all vehicles not exceeding 2610 kg (Euro 5/6). • EU regulations introduce different emission limits for *compression ignition* (diesel) and *positive ignition* (gasoline, NG, LPG, ethanol,...) vehicles. Diesels have more stringent CO 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. **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 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**: **???**

[5] 'Gasoline Prices around the World, 28-Sep-2015 | GlobalPetrolPrices.com' <http://www.globalpetrolprices.com/gasoline_prices/> [accessed 5 October 2015].
[6] World Bank, *Worldwide Total Motor Vehicles (per 1,000 People)*, 2011 <http://chartsbin.com/view/1114> [accessed 30 June 2015].

		Actions to expand, improve and promote public transport and mass transit: **???** **Actions to promote non-motorized transport**: *(ex: include sidewalks and bike lanes in new road projects, car-free areas etc)* **???**
REDUCE EMISSIONS FROM OPEN BURNING: OUTDOOR	**Outdoor, open burning**: *(ex: is it commonly done? burning what kinds of wastes? etc*)	**Legal framework***: (ex: is burning banned?)* **???** **Actions to prevent open burning of municipal waste and / or agricultural waste**: **???**
REDUCE EMISSIONS FROM OPEN BURNING: INDOOR	**Dominant fuels used for cooking and space heating**: • Since the economic down turn, increased wood fuel use for domestic heating is a leading cause of air pollution **Impact**: • Exceedance of daily limit value for PM10	**Indoor air pollution regulated**: *(Yes / No)* **???** **Promotion of non-grid / grid electrification**: **???** **Promotion of cleaner cooking fuels and clean cook stoves**: **???** **Other actions to reduce indoor biomass burning, or to reduce its emissions**: • New legislation in Greece concerning short term action plans on particulate matter pollution • Economic incentives for promoting electric power use instead of biomass burning for heating • Economic incentives in case of diesel oil use for heating • Economic incentives in case of withdrawal of diesel oil-heating systems and replacement with natural gas-heating systems. • Determination of specifications for solid biomass materials. • Emission control campaigns for the heating systems.