

The former Yugoslav Republic of Macedonia (FYROM) 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.

The former Yugoslav Republic of Macedonia Air Quality Policy Matrix		
Goals	Status	Current Policies & Programmes
GENERAL OVERVIEW	<p>Overall situation with respect to air quality in the country, including key air quality challenges:</p> <ul style="list-style-type: none"> ● Concentration levels for most components are above the EU limit values in selected areas within FYROM ● Emissions from energy generation and transportation are the most important contributors to air pollution in FYROM ● Observations have recorded high levels of PM concentration, above the EU standards ● Approximately 1,350 lives are lost annually due to fine particulate matter air pollution with thousands of lost-productive days¹. ● Exceedances of O₃ target values are annually recorded during summer, due increased solar radiation. ● WHO estimates that outdoor air pollution causes 300 premature deaths annually² <p>Air quality monitoring system:</p> <ul style="list-style-type: none"> ● 	<p>National Ambient air quality standards: exist</p> <p>National Air Quality Policy: ???</p> <p>Air Quality legislation / programmes:</p> <ul style="list-style-type: none"> ● In 2012, the National Plan for the protection of ambient air quality was adopted, with measures for transport, energy, industry, agriculture, air pollution and air quality. ● The Programme for gradual reduction of emissions of polluting substances at national level contains projections for 2012-2020 and reduction measures. <p>Other: ???</p> <ul style="list-style-type: none"> ●

¹ 'FYR of Macedonia - Air Pollution' <http://web.worldbank.org/archive/website01354/WEB/0__CO-43.HTM> [accessed 12 October 2015].

² WHO, 'WHO | Country Profiles of Environmental Burden of Disease', WHO, 2008 <http://www.who.int/quantifying_ehimpacts/national/countryprofile/en/#T>.

<p>REDUCE EMISSIONS FROM INDUSTRIES</p>	<p>Industries that have the potential to impact air quality:</p> <ul style="list-style-type: none"> ● Air pollution from industrial installations emanates from the following: food processing, beverages, textiles, chemicals, iron, steel, cement, energy, pharmaceuticals among others <p>GDP of country: USD 10.65B in 2013³</p> <p>Industries' share of GDP: 27.5%⁴</p> <p>Electricity sources:</p> <ul style="list-style-type: none"> ● 66.4% of the installed electricity generating capacity (1.953 million KW in 2010) is generated from fossil fuel, 33.2% from hydroelectric plants and 0.4% is generated from other renewable sources⁵ <p>Others</p> <ul style="list-style-type: none"> ● 	<p>Emission regulations for industries: ???</p> <p>Small installation's emissions regulated: (Yes/No) ???</p> <p>Renewable energy investment promoted: ???</p> <p>Energy efficiency incentives: (ex: Subsidies, labelling, rebates etc)</p> <ul style="list-style-type: none"> ● The Energy Efficiency Strategy of Macedonia has recognised different areas with huge potential of energy savings. ● Total energy savings until 2020 that may be achieved by the implementation of the Strategy's energy programs, according to the conservative approach, are estimated at 130,000 MWh. <p>Incentives for clean production and installation of pollution prevention technologies: ???</p> <p>Actions to ensure compliance with regulations: (monitoring, enforcement, fines etc) ???</p> <ul style="list-style-type: none"> ● 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) ???
<p>REDUCE EMISSIONS FROM TRANSPORT</p>	<p>Key transport-related air quality challenges: (ex: vehicle growth, old fleet, dirty fuel, poor public transport etc)</p> <ul style="list-style-type: none"> ● Transport is among the most important source of air pollution in the FYROM ● Use of private cars is discouraged as demonstrated by the high fuel cost which stood at USD 1.13 per litter in 2015⁶. ● Private car ownership is low with 155 cars per 1000 individuals in 2010⁷ 	<p>Vehicle emission limit: (Euro rating)</p> <ul style="list-style-type: none"> ● From July 2015 the limits for used vehicles is Euro 4 and Euro 5 for new ones⁸. <p>Fuel Sulphur content: (in ppm) Maximum allowable sulphur level in petrol and diesel fuels is 10ppm</p> <p>Fuel Lead content: All vehicles use lead free gasoline</p> <p>Restriction on used car importation: ???</p> <p>Actions to expand, improve and promote public transport and mass transit: ???</p> <p>Actions to promote non-motorized transport: (ex: include sidewalks and bike lanes</p>

³ 'Countries of the World - 32 Years of CIA World Fact Books', 2015 <<http://www.theodora.com/wfb/#R>>.

⁴ 'Countries of the World - 32 Years of CIA World Fact Books'.

⁵ 'Countries of the World - 32 Years of CIA World Fact Books'.

⁶ 'Gasoline Prices around the World, 28-Sep-2015 | GlobalPetrolPrices.com' <http://www.globalpetrolprices.com/gasoline_prices/> [accessed 5 October 2015].

⁷ World Bank, *Worldwide Total Motor Vehicles (per 1,000 People)*, 2011 <<http://chartsbin.com/view/1114>> [accessed 30 June 2015].

		<i>in new road projects, car-free areas etc) ???</i>
REDUCE EMISSIONS FROM OPEN BURNING: OUTDOOR	Outdoor, open burning: <i>(ex: is it commonly done? burning what kinds of wastes? etc)</i>	Legal framework: <i>(ex: is burning banned?) ???</i> 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: ??? Impact: ● WHO estimates that indoor air pollution causes <100 premature deaths annually ⁹	Indoor air pollution regulated: <i>(Yes / No) ???</i> 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: ???

⁸ UNEP, 'UNEP - Transport - Partnership for Clean Fuels and Vehicles', 2015 <<http://www.unep.org/transport/new/pcfiv/>> [accessed 28 September 2015].

⁹ WHO, 'WHO | Country Profiles of Environmental Burden of Disease', *WHO*, 2008 <http://www.who.int/quantifying_ehimpacts/national/countryprofile/en/#T>.