## 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 countrylevel 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 <u>Vered.Ehsani@unep.org</u> and <u>George.Mwaniki@unep.org</u>.

The former Y	The former Yugoslav Republic of Macedonia Air Quality Policy Matrix			
Goals	Status	Current Policies & Programmes		
GENERAL OVERVIEW	Overall situation with respect to air quality in the	National Ambient air quality standards: exist		
	country, including key air quality challenges:	National Air Quality Policy: ???		
	• Concentration levels for most components are above the EU limit values in selected areas within FYROM			
	• Emissions from energy generation and	Air Quality legislation / programmes:		
	transportation are the most important contributors to air pollution in FYROM	• 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.		
	<ul> <li>Observations have recorded high levels of PM concentration, above the EU standards</li> </ul>	<ul> <li>The Programme for gradual reduction of emissions of polluting substances at national level contains projections for 2012-2020 and reduction measures.</li> </ul>		
	• Approximately 1,350 lives are lost annually due to fine particulate matter air pollution with thousands of lost-productive days <sup>1</sup> .	Other: ???		
	<ul> <li>Exceedances of O<sub>3</sub> target values are annually recorded during summer, due increased solar radiation.</li> </ul>			
	• WHO estimates that outdoor air pollution causes 300 premature deaths annually <sup>2</sup>			
	Air quality monitoring system:			
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<sup>&</sup>lt;sup>1</sup> 'FYR of Macedonia - Air Pollution' <http://web.worldbank.org/archive/website01354/WEB/0\_\_CO-43.HTM> [accessed 12 October 2015].

<sup>&</sup>lt;sup>2</sup> WHO, 'WHO | Country Profiles of Environmental Burden of Disease', WHO, 2008

<sup>&</sup>lt;http://www.who.int/quantifying\_ehimpacts/national/countryprofile/en/#T>.

REDUCE EMISSIONS FROM INDUSTRIES	<ul> <li>Industries that have the potential to impact air quality:</li> <li>Air pollution from industrial installations emanates from the following: food processing, beverages, textiles, chemicals, iron, steel, cement, energy, pharmaceuticals among others</li> <li>GDP of country: USD 10.65B in 2013<sup>3</sup></li> <li>Industries' share of GDP: 27.5%<sup>4</sup></li> <li>Electricity sources:</li> <li>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 sources<sup>5</sup></li> <li>Others</li> </ul>	<ul> <li>Emission regulations for industries: ???</li> <li>Small installation's emissions regulated: (Yes/No) ???</li> <li>Renewable energy investment promoted: ???</li> <li>Energy efficiency incentives: (ex: Subsidies, labelling, rebates etc)</li> <li>The Energy Efficiency Strategy of Macedonia has recognised different areas with huge potential of energy savings.</li> <li>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.</li> <li>Incentives for clean production and installation of pollution prevention technologies: ???</li> <li>Actions to ensure compliance with regulations: (monitoring, enforcement, fines etc) ???</li> <li>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) ???</li> </ul>
REDUCE EMISSIONS FROM TRANSPORT	<ul> <li>Key transport-related air quality challenges: (ex: vehicle growth, old fleet, dirty fuel, poor public transport etc)</li> <li>Transport is among the most important source of air pollution in the FYROM</li> <li>Use of private cars is discouraged as demonstrated by the high fuel cost which stood at USD 1.13 per litter in 2015<sup>6</sup>.</li> <li>Private car ownership is low with 155 cars per 1000 individuals in 2010<sup>7</sup></li> </ul>	<ul> <li>Vehicle emission limit: (<i>Euro rating</i>)</li> <li>From July 2015 the limits for used vehicles is Euro 4 and Euro 5 for new ones<sup>8</sup>.</li> <li>Fuel Sulphur content: (<i>in ppm</i>) Maximum allowable sulphur level in petrol and diesel fuels is 10ppm</li> <li>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: ??? Actions to promote non-motorized transport: (<i>ex: include sidewalks and bike lanes</i></li> </ul>

 <sup>&</sup>lt;sup>3</sup> 'Countries of the World - 32 Years of CIA World Fact Books', 2015 < http://www.theodora.com/wfb/#R>.
 <sup>4</sup> 'Countries of the World - 32 Years of CIA World Fact Books'.

 <sup>&</sup>lt;sup>5</sup> 'Countries of the World - 32 Years of CIA World Fact Books'.
 <sup>6</sup> 'Gasoline Prices around the World, 28-Sep-2015 | GlobalPetrolPrices.com' <a href="http://www.globalpetrolprices.com/gasoline\_prices/">http://www.globalpetrolprices.com/gasoline\_prices/</a> [accessed 5 October 2015].

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

		in new road projects, car-free areas etc) ???
REDUCE EMISSIONS FROM OPEN BURNING: OUTDOOR	<b>Outdoor, open burning</b> : (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	<ul> <li>Dominant fuels used for cooking and space heating: ???</li> <li>Impact:</li> <li>WHO estimates that indoor air pollution causes &lt;100 premature deaths annually<sup>9</sup></li> </ul>	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: ???



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