

Romania 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.

Romania 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"> • Systematic monitoring of air quality reveals that the level of atmospheric pollution remains high in many areas in Romania, • Most exceedances were recorded for PM, SO₂, NO_x and selected heavy metals • Stationary internal combustion engines are some of the leading sources of air pollutants in Romania • WHO estimates that outdoor air pollution causes 9600 premature deaths annually¹ <p>Air quality monitoring system:</p> <ul style="list-style-type: none"> • The air quality in Romania is permanently monitored by measuring stations, distributed across the entire country, which are part of the automatic air quality monitoring network 	<ul style="list-style-type: none"> • Since Romania is a member state of the European Union, its air quality regulations are supposed to be in line with the European legislation on air quality. <p>National Air Quality Policy: ???</p> <p>Air Quality legislation / programmes:</p> <ul style="list-style-type: none"> • The European legislation on air quality is built to the effect that Member States divide their territory into a number of zones and agglomerations. • In these zones and agglomerations, the Member States should undertake assessments of air pollution levels using measurements and modelling and other empirical techniques. • Where levels are elevated, the Member States should prepare an air quality plan or programme to ensure compliance with the limit value before the date when the limit value formally enters into force. • In addition, information on air quality should be disseminated to the public. <p>Other:</p> <ul style="list-style-type: none"> • The Clean Air For Europe (CAFÉ) Directive is the principal legal instrument at European Union level relating to air pollutants, and thus seeks to protect the environment and human health. • It sets out inter alia assessment and measurement standards, and reduction targets for the atmospheric concentration of particulate matter constituting the most harmful substances in the air for human health. • It obliges the Member States to limit the exposure concentration for particulate matter PM 2.5 to 20 micrograms/m³ in 2015.

¹ 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: power generation, electric machinery and equipment, light machinery, mining, construction materials, metallurgy, chemicals, food processing, petroleum refining among others ● Industrial emissions are the most important source of air pollutants in Romania <p>GDP of country: USD 188.9B in 2013</p> <p>Industries' share of GDP: 34.2%</p> <p>● Electricity sources:</p> <ul style="list-style-type: none"> ● 55.1% of the installed electricity generating capacity (21.77million KW in 2012) is generated from fossil fuel, 6.5% from nuclear, 3.1% from hydroelectric plants and the rest 8.6% is generated from other renewable sources² 	<p>Emission regulations for industries:</p> <ul style="list-style-type: none"> ● 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. <p>Small installation's emissions regulated: (Yes/No) ???</p> <p>Renewable energy investment promoted:</p> <ul style="list-style-type: none"> ● According to the EU Renewables Directive, Romania will have to source 24% of its final energy demand from renewable sources by 2020, up from 17.8% in 2005. <p>Energy efficiency incentives: (ex: Subsidies, labelling, rebates etc) ???</p> <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"> ● Romania has a large and a well-developed modern transport system comprising of busses, trams, trolleys busses and taxis. ● Use of private cars is discouraged as demonstrated by the high fuel cost which stood at USD 1.31 per liter in 	<p>Vehicle emission limit: (Euro rating)</p> <ul style="list-style-type: none"> ● 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 <i>compression ignition</i> (diesel) and <i>positive ignition</i> (gasoline, NG, LPG, ethanol,...) vehicles. Diesels have more

² 'Countries of the World - 32 Years of CIA World Fact Books', 2015 <<http://www.theodora.com/wfb/#R>>.

	<p>2015.</p> <ul style="list-style-type: none"> ● Private car ownership is high with 314 cars per 1000 individuals in 2014 ● Romania has established low emission zones in the major cities. Vehicles with high emissions and low emissions classification are either prohibited from accessing these zones or are subjects of specific restrictions. 	<p>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.</p> <p>Fuel Sulphur content: <i>(in ppm)</i></p> <ul style="list-style-type: none"> ● 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 <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: <i>(ex: include sidewalks and bike lanes in new road projects, car-free areas etc) ???</i></p> <p>Other transport-related actions: ???</p>
<p>REDUCE EMISSIONS FROM OPEN BURNING: OUTDOOR</p>	<p>Outdoor, open burning: <i>(ex: is it commonly done? burning what kinds of wastes? etc) ???</i></p>	<p>Legal framework: <i>(ex: is burning banned?) ???</i></p> <p>Actions to prevent open burning of municipal waste and / or agricultural waste: ???</p>
<p>REDUCE EMISSIONS FROM OPEN BURNING: INDOOR</p>	<p>Dominant fuels used for cooking and space heating:</p> <ul style="list-style-type: none"> ● Impact: WHO estimates that indoor air pollution causes 400 premature deaths annually³ ● CO and PM are the most common indoor air pollutant ● Their concentrations are higher during wintertime compared to other seasons ● Behavioural hazards such as smoking indoor, pets inside, and low ventilation also contribute in poor indoor air quality 	<p>Indoor air pollution regulated: <i>(Yes / No) ???</i></p> <p>Promotion of non-grid / grid electrification: ???</p> <p>Promotion of cleaner cooking fuels and clean cook stoves: ???</p> <p>Other actions to reduce indoor biomass burning, or to reduce its emissions: ???</p>

³ WHO, ‘WHO | Country Profiles of Environmental Burden of Disease’, WHO, 2008
http://www.who.int/quantifying_ehimpacts/national/countryprofile/en/#T.

