

Poland 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.

Poland 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"> • Air pollution is one of the most important environmental issues facing Poland today. • Systematic monitoring of air quality reveals that the level of atmospheric pollution remains high in many areas in Poland. • In Poland the main contributor to poor air quality is its over dependence on coal for power production. • Coal provides 90% of Poland's energy making it one of Europe's most heavily dependent on traditional fossil fuels and the biggest European coal exporter. • Severe air pollution resulting from the emissions of coal-fired power plants has measurably affected human health. For example, the infant mortality rate was over 30 deaths per 1,000 births, nearly five times the levels in some countries of Western Europe. <p>Air quality monitoring system: ???</p> <ul style="list-style-type: none"> • WHO estimates that outdoor air pollution 	<p>National Ambient air quality standards:</p> <ul style="list-style-type: none"> • Since Poland 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. • Under Article 33(1) of the CAFE Directive, the Republic of Poland had to adopt and bring into force the national legal provisions necessary to implement the directive by 11 June 2010. • The Republic of Poland has not incorporated into Polish law or brought into force all the necessary provisions. Verify???

	causes 6200 premature deaths annually ¹	
REDUCE EMISSIONS FROM INDUSTRIES	<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, machine building, iron and steel, coal mining, chemicals, shipbuilding, food processing among others <p>GDP of country: USD 513.9B in 2013²</p> <p>Industries' share of GDP: 33.3%</p> <p>Electricity sources:</p> <ul style="list-style-type: none"> • 89.2% of the installed electricity generating capacity (33.36million KW in 2010) is generated from fossil fuel, 2.8% from hydroelectric plants and the rest 3.7% is generated from renewable sources <p>Others</p> <ul style="list-style-type: none"> • The energy sector is the leading source of air pollutants emissions • Poland's coal-fired generation fleet is very old, with more than 70% of power plants over 30 years old, 40% over 40 years old, and 15% over 50 years old, with more than half slated for retirement within 5 – 20 years. • In the period 1996-2006 the energy efficiency index for the whole economy (ODEX) decreased by 37%, against 8% for the EU27. This is due to remarkable improvements in the industrial sector. 	<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, Poland 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> <p>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>

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>>.

<p>REDUCE EMISSIONS FROM TRANSPORT</p>	<p>Outdoor, open burning: <i>(ex: is it commonly done? burning what kinds of wastes? etc)</i></p> <ul style="list-style-type: none"> ● Poland has a large and modern transport network comprised of roads, airports, railway systems among others. ● In urban centres the public transport system is well developed, buses and trams service most parts of the major cities ● Use of private cars is discouraged as demonstrated by the high fuel cost which stood at USD 1.27 per litre in 2015³. ● Private car ownership is high with 580 cars per 1000 individuals in 2011⁴ 	<p>Vehicle emission limit: <i>(Euro rating)</i></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 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>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 since 2003</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:</p>	<p>Outdoor, open burning: <i>(ex: is it commonly done? burning what kinds of wastes? etc)</i></p> <p>???</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>

³ ‘Gasoline Prices around the World, 28-Sep-2015 | GlobalPetrolPrices.com’ <http://www.globalpetrolprices.com/gasoline_prices/> [accessed 5 October 2015].

⁴ 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].

OUTDOOR		
REDUCE EMISSIONS FROM OPEN BURNING: INDOOR	<p>Dominant fuels used for cooking and space heating:</p> <p>Impact:</p>	<p>Indoor air pollution regulated: (Yes / No) ???</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>