

Belgium 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.

<u>Belgium Air Quality Policy Matrix</u>		
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 quality in Belgium is characterised by pollution levels that are occasionally above the European annual limit value. ● In 2011 the European annual limit value for PM10 was attained everywhere in Belgium. ● However, the number of days where the daily mean PM10 concentration exceeded 50µg/m³ was well above the permitted 35. ● However, comparing these values with the WHO recommendation, virtually the entire Belgium population was exposed PM concentrations well above the recommended value. ● Compliance with the European annual limit for NO2 remains problematic in the major urban areas ● WHO estimates that outdoor air pollution causes 2000 premature deaths annually¹ 	<p>National Ambient air quality standards: yes</p> <ul style="list-style-type: none"> ● Complete harmonization with European Union air quality legislation ● The current standards are contained in the Clean Air for Europe (CAFE) Directive (EP & CEU, 2008) and the Fourth Daughter Directive (EP & CEU, 2004). ● These Directives also include rules on how Member States should monitor, assess and manage ambient air quality. <p>National Air Quality Policy</p> <ul style="list-style-type: none"> ● 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; <ul style="list-style-type: none"> - 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. <p>Air Quality legislation / programmes:</p> <ul style="list-style-type: none"> ● Belgium's regulations on air quality are all based on provisions adopted by the EU <p>Other:</p>

¹ WHO, 'WHO | Country Profiles of Environmental Burden of Disease', WHO, 2008
http://www.who.int/quantifying_ehimpacts/national/countryprofile/en/#T.

	<p>Air quality monitoring system:</p> <ul style="list-style-type: none">● Air quality is measured by a sophisticated national air quality monitoring network.	<ul style="list-style-type: none">● A review of the EU air quality policy was conducted in 2011-2013● This review lead to the adoption of a Clean Air Policy Package in December 2013, this package consists of :● A new Clean Air Programme for Europe with new air quality objectives for the period up to 2030,● A revised National Emission Ceilings Directive with stricter national emission ceilings for the six main pollutants, and● A proposal for a new Directive to reduce pollution from medium-sized combustion installations
--	--	---

<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: motor vehicle assembly, transportation equipment, scientific instruments, processed food and beverages, chemicals, base metals, textiles, glass and petroleum among others <p>GDP of country: USD 507.4 B in 2013²</p> <p>Industries' share of GDP: 22.6%³ Electricity sources:</p> <ul style="list-style-type: none"> ● 43.6% of the installed electricity generating capacity (18.32million KW in 2010) is generated from fossil fuel, 32.3% from nuclear, 0.6% from hydroelectric plants and the rest 16.3% is generated from other renewable sources⁴ 	<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 was 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: (<i>Yes/No</i>) yes: royal decrees with product standards for the smallest installations (up to 400 kW), regional emission limit values for installations up to 50 MW.</p> <p>Renewable energy investment promoted:</p> <ul style="list-style-type: none"> • The National Renewable Energy Action Plan (NREAP) for Belgium aims at attaining a 13% (of domestic consumption) energy production from renewable sources • In Belgium, electricity from renewable sources is promoted mainly through a quota system based on the trade of certificates. <p>Energy efficiency incentives: (<i>ex: Subsidies, labelling, rebates etc</i>)</p> <ul style="list-style-type: none"> • In the 2013 National Reform Program, Belgium set a provisional target of 18% reduction
---	---	---

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'.

	<p>Others ???</p> <ul style="list-style-type: none">•	<p>in primary energy consumption compared to 2007 levels by 2020,</p> <p>Incentives for clean production and installation of pollution prevention technologies: The use of Best Available Technologies is required</p> <p>Actions to ensure compliance with regulations: monitoring obligations combined with enforcement (<i>monitoring, enforcement, fines etc</i>)</p> <p>Other actions at national, sub-national and / or local level to reduce industrial emissions: (<i>can include incentives to move industries to less populated areas here</i>) Flemish voluntary agreements with glass producers, chemical industry and electricity production on reduction of NO_x (for electricity also SO₂)</p>
--	--	---

<p>REDUCE EMISSIONS FROM TRANSPORT</p>	<p>Key transport-related air quality challenges: <i>(ex: vehicle growth, old fleet, dirty fuel, poor public transport etc)</i></p> <ul style="list-style-type: none"> ● Transport is among the most important source of air pollution in Belgium ● Public transport in Belgium is well developed and several options spanning from railways, trams, metros and bus are available for commuters. ● Use of private cars is discouraged as demonstrated by the high fuel cost which stood at USD 1.48 per litre in 2015⁵. ● Private car ownership is high with 559 cars per 1000 individuals in 2010⁶ 	<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. Fuel Sulphur content: <i>(in ppm)</i> ● 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: ??? <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>REDUCE</p>	<p>Outdoor, open burning: <i>(ex: is it commonly</i></p>	<p>Legal framework: <i>(ex: is burning banned?)</i> Open burning is banned, except for some well-defined situations (campfires, destruction of infected organic materials, burning of agricultural waste when there is no possibility to remove the materials, ...). See Vlareem Titel II, hoofdstuk 6.11</p>

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].

EMISSIONS FROM OPEN BURNING: OUTDOOR	<i>done? burning what kinds of wastes? etc) ???</i>	Actions to prevent open burning of municipal waste and / or agricultural waste: sensibilisation campaign on outdoor burning (www.stookslim.be)
REDUCE EMISSIONS FROM OPEN BURNING: INDOOR	<p>Dominant fuels used for cooking and space heating: ??? Impact: ???</p> <ul style="list-style-type: none"> • 	<p>Indoor air pollution regulated: (<i>Yes / No</i>) Yes: Decision of the Flemish government on June 11, 2004 on measures to reduce the health risks of indoor pollution</p> <p>Promotion of non-grid / grid electrification: no</p> <p>Promotion of cleaner cooking fuels and clean cook stoves: no</p> <p>Other actions to reduce indoor biomass burning, or to reduce its emissions: sensibilisation campaign on indoor burning (www.stookslim.be)</p>