

Ireland 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.

Ireland 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"> • Overall, air quality in Ireland compares favourably with other EU Member States. • In 2013, measured values of SO₂, NO₂, CO, O₃, PM₁₀ and PM_{2.5}, heavy metals, benzene and polycyclic aromatic hydrocarbons (PAH) were all below limit and target values set out in the CAFE Directive and 4th Daughter Directive. • However, the concentrations of some of these parameters were higher than the WHO Air Quality Guideline values. • This was particularly so with respect to PM₁₀, PM_{2.5}, O₃ and PAH. • Air pollution in Ireland can be of a local, regional and/or transboundary nature caused by the emission of specific pollutants which either directly, or through chemical reactions and transformations, lead to 	<p>National Ambient air quality standards: yes</p> <ul style="list-style-type: none"> • 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"> • Irish regulations on air quality are all based on provisions adopted by the EU. As new provisions are made, Irish legislation will be adapted accordingly. <p>Other:</p> <ul style="list-style-type: none"> • A review of the EU air quality policy was conducted in 2011-2013 • This review led to the adoption of a Clean Air Policy Package in December 2013, this package

	<p>negative impacts.</p> <ul style="list-style-type: none"> ● WHO estimates that outdoor air pollution causes <100 premature deaths annually¹ <p>Air quality monitoring system:</p> <ul style="list-style-type: none"> ● Air quality is measured by a sophisticated national air quality monitoring network 	<p>consists of :</p> <ul style="list-style-type: none"> ● 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"> ● Major industries in the country includes; pharmaceuticals, chemicals, computer hardware and software, food products, beverages and brewing and medical devices among others <p>GDP of country: USD 220.9 billion in 2013</p> <p>Industries' share of GDP: 28% of</p> <ul style="list-style-type: none"> ● Electricity sources: ● 76.2% of the installed electricity generating capacity (8.316 million KW in 2010) is generated from fossil fuel, 2.9% from hydropower and the rest 17.4% from renewable sources. - 	<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: <i>(Yes/No)</i> yes</p> <p>Renewable energy investment promoted:</p> <p>Energy efficiency incentives: <i>(ex: Subsidies, labelling, rebates etc)</i></p> <ul style="list-style-type: none"> ● The current Irish National Energy Efficiency Action Plan targets five key areas for improving energy efficiency in the country: <ul style="list-style-type: none"> - Establishing obligations on public-sector bodies to address consumption, procurement and reporting of energy use, - Establishing a national Energy Performance Contracting (EPC) process for the commercial and public sectors, to assist with retrofitting and financing, - Introducing appropriate Pay-As-You-Save models for domestic and non-domestic energy efficiency upgrades,

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

		<p>- Introducing energy-saving targets for energy suppliers, and Establishing a cross-departmental implementation group for the delivery of the NEEAP.</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>
REDUCE EMISSIONS FROM TRANSPORT	<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 Ireland. ● Transport in Ireland 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 1.56 per litre in 2015². ● Private car ownership is high with 513 cars per 1000 individuals in 2009³ 	<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 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: (in ppm)</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: (ex: include sidewalks and bike lanes in new road projects, car-free areas etc) ???</p>
REDUCE	Outdoor, open burning: (ex: is it commonly	Legal framework: (ex: is burning banned?) ???

² ‘Gasoline Prices around the World, 28-Sep-2015 | GlobalPetrolPrices.com’ <http://www.globalpetrolprices.com/gasoline_prices/> [accessed 5 October 2015].

³ 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].

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: ???
REDUCE EMISSIONS FROM OPEN BURNING: INDOOR	<p>Dominant fuels used for cooking and space heating:</p> <ul style="list-style-type: none"> ● In Ireland some residential homes use wood burning stoves for space heating ● Although the efficiency of these stoves has significantly improved over the years, wood burning represents the highest polluting form of heating in Ireland. <p>Air pollution from stoves is affected by the complex interplay of several factors including the type of stove or boiler, chimney design, fuel and patterns of operation</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>