

Norway 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.

Norway 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"> • On average, air quality in Norway is good, except for exceptional periods during summer and wintertime when pollution levels can rise. • Concentration levels for most components are below the EU limit values, with the exception of PM and NOx in parts of the major cities. • Transboundary transport of air pollutants, especially from forest and agricultural fires, play a role in Norway's air quality. • Emissions from transport is the most important contributor to air pollution in Norway • Poor air quality in Norway is usually experienced during winter months, mainly because several sources are more active during this time compared to other seasons, these sources includes; wood burning for space heating, use of studded tires and exhaust emissions using a cold engine in freezing temperatures. • In addition prevailing meteorological conditions can generate temperature inversions which lead to poorer dispersion and increased pollution concentration. • PM and NOx are the most important pollutants 	<p>National Ambient air quality standards:</p> <ul style="list-style-type: none"> • As a party to the "Agreement on the European Economic Area" (EEA), Norway must also comply with EU Directives. • 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. • Norway has decided to tighten its limit values for particulate matters from 1 January 2016. Norway will thus have stricter limit values than the requirement from the EU Directives. <p>National Air Quality Policy:</p> <ul style="list-style-type: none"> • In addition to legally binding limit values, Norway also operates with more ambitious target values that are politically determined. <p>Air Quality legislation / programmes:</p> <ul style="list-style-type: none"> • The Pollution Control Act of 13 March 1981's purpose was to protect the outdoor environment against pollution and to reduce existing pollution, and to reduce the quantity of waste and to promote better waste management <p>Other:</p> <ul style="list-style-type: none"> • The Ministry of Climate and Environment is responsible for the overall environmental policy. • However, different sector ministries are responsible for developing relevant measures and tools to combat local air pollution. The Ministry of Transport and Communications among others has the overall responsibility for • Ministry of Petroleum and Energy has responsibility for Enova SF. Enova SF was established in 2001 in order to drive forward the changeover to more environmentally friendly consumption and generation of energy in Norway.

	<p>in Norwegian urban centres</p> <p>Air quality monitoring system:</p> <ul style="list-style-type: none"> • Air quality is monitored at several of measuring points in various locations in Norway 	
<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; petroleum and gas, food processing, shipbuilding, pulp and paper products, metals, chemicals, timber and mining among others <p>GDP of country: USD 515.8 Billion in 2013</p> <p>Industries' share of GDP: 42.3%</p> <p>Electricity sources:</p> <ul style="list-style-type: none"> • 4.6% of the installed electricity generating capacity (30.18 million KW in 2010) is generated from fossil fuel, 93.2% from hydropower and the rest 2.2% from renewable sources 	<p>Emission regulations for industries:</p> <p>As a party to the “Agreement on the European Economic Area” (EEA), Norway must also comply with EU Directives</p> <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> <p>Incentives for clean production and installation of pollution prevention technologies: ???</p> <p>Actions to ensure compliance with regulations: <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> ???</p> <ul style="list-style-type: none"> • The EU Industrial Emissions Directive 2010/75/EU (IED) entered into force on 6 January 2011. • The IED tightens emission limit values (ELVs) in certain industrial sectors across the European Union (EU). • For Combustion Plants NOx, SO2 and PM levels were tightened; CO limits were added for gas fired plants. • It also introduced minimum standards for environmental inspections of industrial installations and sets out requirements for more frequent permit reviews through the cyclic review and application of Best Available Techniques (BAT) conclusions.
<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 in Norway is well developed and several options spanning from Railways, tramps, metros and bus are available for commuters. • Use of private cars is discouraged as demonstrated by the high fuel cost which stood at USD 1.71 per litre in 2015. • Transport is among the most important source 	<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 for HDV • As a member of the Agreement on the European Economic Area, Norway is obliged to introduce EC Regulation No. 715/2007 and it’s implementing Regulation (EC) No. 692/2008. • This Regulation sets tighter vehicle emission limits, known as Euro 5 and Euro 6. <p>Fuel Sulphur content: <i>(in ppm):</i></p> <ul style="list-style-type: none"> • Norway has transposed the EU legislation on quality requirements of fuel, as such the sulphur content is regulated at below 10ppm for both gasoline and diesel. <p>Restriction on used car importation: Not relevant</p>

<p>of air pollution in the Norway¹</p> <ul style="list-style-type: none"> • Private car ownership is high with 591 cars per 1000 individuals in 2010² • Norway has the world's largest share of electric cars in the car fleet 	<p>Actions to expand, improve and promote public transport and mass transit:</p> <ul style="list-style-type: none"> • The Climate Agreement means that passenger growth in large cities will be absorbed by public transport, cycling and walking. • In Norway's National Transport Plan 2014 – 2023 (Report to our parliament as a White Paper in 2013) it is stated that the transport sector, particularly in urban areas, must be developed in a more environmentally friendly way to curb greenhouse gas emissions and other harmful environmental effects. In the plan there is the objective that the growth in passenger transport in urban areas must be absorbed by public transport, cycling and walking (the so-called Zero growth objective). In Norway it is the counties (19) that have the responsibility for the <u>regional</u> transport – buses, tramway, light rail and local boat/ferry services. The regional level (counties) allocate approximately 12 000 million NOK (1 400 mill. USD/1 300 mill. Euro) each year to public transport in the counties. Besides that the government has a specific Reward Scheme to the largest cities-/town areas (1 300 mill. NOK) to help them to achieve the Zero growth objective. • The government level has the responsibility for the railways. The government allocate approximately 3 000 MNOK per year to public transport services. In addition the government is responsible for the infrastructure and allocate approximately 18 000 million NOK each year for maintenance, operations and investments." <p>Actions to promote non-motorized transport:</p> <p><i>. (ex: include sidewalks and bike lanes in new road projects, car-free areas etc)</i></p> <p>The Climate Agreement means that passenger growth in large cities will be absorbed by public transport, cycling and walking</p> <ul style="list-style-type: none"> • Urban environment agreements entail a comprehensive approach in urban policy whereby the government, county authorities and municipalities unite in negotiations and undertake to pursue joint objectives enshrined in the urban environment agreement. The urban environment agreements will include targets and measures for increasing public transport use, cycling and walking, and measures to reduce the use of cars and land to support environmentally friendly transport. • In the state budget for 2016 the government proposes to increase budget allocations for bike/walkway with 50%. In sum, there will be nearly 900 million available to the bicycle lane on the national road
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¹ 'Gasoline Prices around the World, 28-Sep-2015 | GlobalPetrolPrices.com' <http://www.globalpetrolprices.com/gasoline_prices/> [accessed 5 October 2015].

² 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].

		<p>network.</p> <p>Other transport-related actions:</p> <ul style="list-style-type: none"> • The EU has introduced common limit values for exhaust emissions to limit pollution. • Municipalities can employ environmental speed limits and fees for driving with studded tyres. • Municipalities can employ congestion charging. The main purpose is to control traffic in order to reduce local queues and local environmental problems. • Municipalities can be introduced bans on specific groups of vehicles, possibly part of this group, within a range. Prohibitions and restrictions can be temporary or permanent nature. • The Norwegian Public Road Administration and local municipalities can introduce temporary local traffic measures on their roads also due to environmental concerns, inter alia, to reduce NO2 exceeding the limit value. • Larger cities can differentiate the rates in existing toll systems by time of day as a temporary measure on days with high pollution. • In Norway, EVs have several benefits including tax exemption for VAT, tax exemption for purchase tax, free parking, access to bus lanes and some other benefits. In 2012 the Norwegian parliament decided to keep the benefits for the first 50,000 zero emission cars or until 2017. • The electric car fleet reached 50.000 units in April 2015. The government decided in May 2015 to prolong the tax benefits at the same level until 2018, and then gradually phase them out. The government also decided to let local authorities decide on user benefits like free parking and access to bus lanes.
<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"> • Household heating is a major, and difficult to regulate, source of emissions of PM10 • Main issues are obsolescence and low efficiency of combustion in heating units and to some extent behavioural traits of households. <p>Impact:</p>	<p>Indoor air pollution regulated: <i>(Yes / No)</i></p> <ul style="list-style-type: none"> • A regulation from 1997 introduced emission limits for PM10 for wood burning stoves sold in Norway. • In general, open burning indoor is not a problem in Norway. <p>Promotion of non-grid / grid electrification: Not relevant</p> <p>Promotion of cleaner cooking fuels and clean cook stoves: The major source for cooking and space heating in Norway is electricity.</p> <p>Other actions to reduce indoor biomass burning, or to reduce its emissions</p>