

# Air pollution in qatar and the uk

[Technology](#), [Development](#)



Pollution is the reduction in the quality of the environment. It can be defined as the inability of the environment to carry out its roles which include sustaining human life, receiving waste and providing natural social amenities such as parks. There are three major types of pollution: air pollution, water or marine pollution, land pollution and noise pollution.

The earth has a given capacity to hold and naturally recycle materials. Due to industrial activities that man is engaged in such as production of polythene, the earth has lost the ability to recycle materials.

It is this inability to naturally recycle these materials that renders pollution a threat to humanity, that is, it has made earth unfit for living thing to an extent that only the fittest survive.

Air pollution is reduction of the quality of air caused by the contamination of the atmosphere by harmful gases, liquid or solid waste that causes undesirable effects to living things thereby reducing their ability to survive on earth.

Air pollution is a contributory factor to other forms of pollution which include water pollution, soil contamination and radio active contamination.

Qatar is one of the most sparsely populated countries in the Middle East with a population of 907, 229 of which 35% are immigrants from other countries like Philippines, Africa. This figure was relatively small before the explosion of immigrants brought by the developments in oil and gas in the region. On the other hand the United Kingdom has a population of about 60 million which grew by 8% in 2007.

Half of this growth is attributed to immigration. The growth in population has constrained resources such as sewages, housing and food. This has led to the bursting of sewages, congestion in housing deforestation especially in Qatar where people are cutting down forests to create space for farming, constructing houses and other amenities in order to accommodate the growing population.[1]

Numbers of industries have continued to increase in both countries as a result of industrial revolution. Although this has created job opportunities thus improving the nation's economy, the level of pollution has tremendously increased.

Qatar's major industries are those producing oil and gas which is a major source of fuel in the world. It is evident that gas reserves in the Northfield make the pillar of the economy and that is why the government through the ministry of energy and industry is planning on monetizing the gas reserves by developing a GTC projects as part of gas development.

On the other hand the United Kingdom industries ranges from food processing, textile manufacturing to car manufacturing. This has an effect on the amount and type of emission that goes to the environment. [2]

The seriousness of harm caused by air pollution from these industries depends on the type of fuel, used the type of inputs into production, the amount of fuel and the engines or machine used in production. Qatar still uses technology and its inputs into production emit more dangerous gases into the atmosphere than in the UK.

This is because the government in the UK uses emission permits, heavily taxes emitters and has banned the use of some raw materials that produces non-recyclable waste into the environment.

Qatar is undertaking the heavy construction more pollution in terms of emission from the construction sites, machines vehicles, fuel, smoke etc. this in terms affects the health of these workers and thus reduces there productivity.

The UK has taken measures such as the production of less smoke emission vehicle use of train and increase taxes on personal vehicle to discourage their use to reduce the amount of air pollution.

#### Air pollution From Transport and Industry in Qatar

Vehicular emission is the main source of air pollution in the Arab region. Other stationary sources, such as outdated power generation stations, refineries, outdated smelters, fertilizers plants and water desalination plants also contribute to air quality deterioration.

The situation is exacerbated by the fast urbanization expansion, the use old technologies and the inadequate measures to avail air emission. Industrial compounds and manufacturing facilities emit gases including co-methane, volatile organic carbons and nitrogen oxides.[3]

Hydrocarbons (HC) in the air e. g. Benzene are the resultant of incomplete fuel combustion or from evaporated unbarred petroleum products from vehicles fuel tanks and or carburettor.

Arab countries emit approximately 3 million tons per year of HC from vehicle emissions. Between 70 and 80 percent of total HC emissions originate from the transportation sector and play an important role in the formulation of photochemical oxidants.[4]

Traffic, not industry is the main source of pollution in Qatar according to air quality tests. Air monitoring equipment set up in various parts of the country has revealed significant increase in pollutants associated with vehicle emissions over the past 10 years particularly nitrogen oxides. (NO<sub>x</sub>) and ozone gases (O<sub>3</sub>).

These pollutants have risen hand-in hand with an increase in the number of cars, which has shot up from 175, 017 in 1996 to 328, 354 by 2006.[5]

#### Air Pollution from Industry and Transport in UK

Air pollution problems in UK are caused mainly by industries. During the industrial revolution, Industries were often located in urban areas during the industrial period but following the Clean Air Acts and with the decline in heavy industry they were relocated to the rural areas.

Estimates for emission of smoke in the UK for 1995 identify that power stations account for 5% of UK emissions and other industries for 3%. The significant source of smoke pollution is therefore not industries but rather vehicles 50% and domestic sources 19%.[6]

Industries are major source of UK Sulphur dioxide pollution. Power stations and all other types of industry account for 90% of all UK pollution. Sulphur dioxide pollution is one of the main pollutants that cause acid rain when it combines with water in the atmosphere to form sulphuric acid. Because the

source of SO<sub>2</sub> in the UK is industry, they are regarded as the main contributors to rainfall acidity.

Acid rain affects urban areas by causing faster erosion of certain building materials and it causes damage to urban vegetation. The major source of NO<sub>x</sub> pollution in the UK is road transport 46% while the majority of NO<sub>x</sub> emissions arise from road transport, the contribution of industrial NO<sub>x</sub> is still important.

Nitrogen oxides are also converted into nitric acid when combined with water in the atmosphere, hence like SO<sub>2</sub>, contributing to acid rain.[7]

[1] [www. up. org. qa/upes/modules](http://www.up.org.qa/upes/modules)

[2] [www. up. org. qa/upes/modules](http://www.up.org.qa/upes/modules)

[3] [http://www. carlisle. army. mil/usacsl/Publications/ESAG904Chap6. pdf](http://www.carlisle.army.mil/usacsl/Publications/ESAG904Chap6.pdf)

[4] [http://www. carlisle. army. mil/usacsl/Publications/ESAG904Chap6. pdf](http://www.carlisle.army.mil/usacsl/Publications/ESAG904Chap6.pdf)

[5] [http://www. carlisle. army. mil/usacsl/Publications/ESAG904Chap6. pdf](http://www.carlisle.army.mil/usacsl/Publications/ESAG904Chap6.pdf)