



2020 Market Analysis- 7th International Conference on Pollution Control & Sustainable Environment

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Air and water pollution are major environmental problems in the Italy and around the world, including water, air and soil contamination due to the incorporation or replacement of new compositions, which could lead to a drastic change in their nature and could even lead to depletion and deterioration of existing natural materials. The Pollutants basically consists of heavy metals, organic compounds, nitrates and phosphates.

According to the European Environment Agency, Italy has the highest number of premature deaths from nitrogen dioxide air pollution as compared to any country in the EU. In 2013, the agency reported last year, the toxic gas mainly from diesel fumes killed over 21,000 people in Italy.

By the mid - October Italian cities had already exceeded EU air quality standards, specifying that cities should have no more than 35 "bad air" days – when PM10 pollution levels exceed micrograms per cubic meter of air – per year.

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Italy has not set a target for banning the sale of new diesel vehicles, unlike some other European countries, including France and the UK.

Particulate matter (PM10 and PM2.5), ozone (O3), and nitrogen dioxide (NO2) are the most problematic pollutants. Estimates of PM2.5 alone in Europe indicate 432,000 premature deaths. Germany and France, Italy has the highest pollutant levels. In fact, 84,400

premature deaths occurred in Italy, followed by Germany (72,000) and France (58,400).

The causes are mainly linked to the transport industry, which is responsible for 46% of the emissions of nitric oxide, to the domestic and commercial heating, which produce 43 to 58% of the particulate matter, and to the energy production, which is the major emitter of sulphur oxides. These are followed by industry, agriculture (particularly for the production of ammonia) and waste, which produce a significant amount of methane (31%).

In terms of life months lost, according to a report published in June by the Italian associations Cittadini per l'Aria: "This means that pollution shortens the life of every Italian of 10 months on average; 14 for those who live in Northern Italy, 6.6 for those who live in Central Italy, and 5.7 for those who live in Southern Italy".

Smoking is common in many major cities in Italy, although it has been banned since 2005 in closed public spaces. In fact, smoking rates rose to 22% in 2014.

A 2006 report by the World Health Organization found significant levels of air pollution in Italian cities ranging from 26.3 to 61.1 milligrams per cubic meter (particle size 10 µm or less is PM10). The WHO guidelines set the standard for air quality at 20 micrograms per cubic meter, whereas the European Union Directive on air quality is set at 40 micrograms per cubic meter (daily limit). The European Environment Agency (EEA) estimated that, due to particulate air pollution, more than 66,000 people die prematurely. The EEA observed an annual average trend of PM10 in Italy below the threshold levels for the period 2012 - 2015. Traffic stations still have high concentrations of particulate matter.

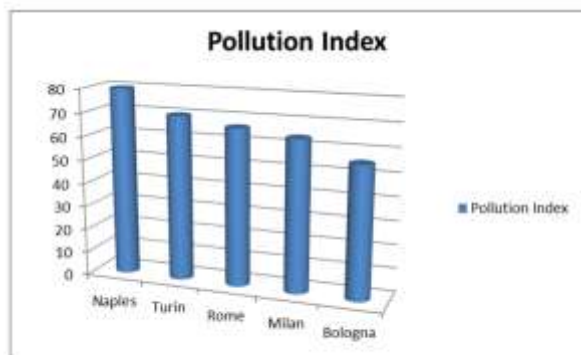


Fig- Pollution index for Naples, Turin, Rome, Milan and Bologna (City of Italy) are 79.78, 69.87, 66.43, 63.88 & 55.61 respectively

As far as air pollution and climate change are concerned, Italy is pushing initiatives to reduce black carbon emissions, especially in the transport sector. Italy co - funded nearly 190 projects at a total cost of 195 million euros through the Sustainable Mobility Fund. Italy has consistently reduced emissions over the past two decades.

For effective recycling, separate waste collection is used in 2013; Waste generation also decreased on average. However, the Organization for Economic Cooperation and Development (OECD)'s 2013 report recommends Italy's "Water Management needs a long term vision, consistent implementation and better governance." It also reports that Italy is currently pursuing a number of water conservation initiatives, including the development of the legal and institutional framework,

the reform of water supply systems and the improvement of water sanitation systems.

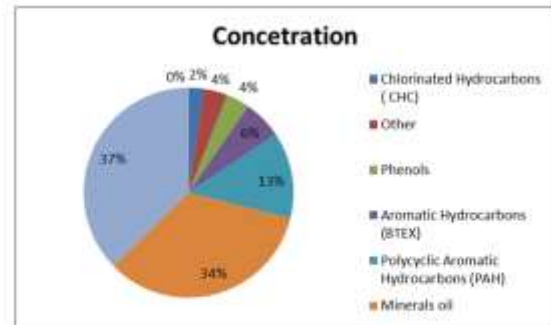


Fig- The ambient levels of Chlorinated Hydrocarbons (CHC), Phenols, Aromatic Hydrocarbons (BTEX), Polycyclic Aromatic Hydrocarbons (PAH), Minerals oil, Heavy metals, Cyanides and other were studied in the Europe.

The concentrations of these compounds were studied for soil and groundwater. It was found that the concentration Heavy metals were very high among all i.e. 37.30%. And the concentration of cyanide was negligible.

Pollution Control 2020 supported by the organizing committee network of renowned scientific and professional expert such as Dr. Bassem Nassouhy, General Manager, Scientific Business Solutions Group UAE provided a platform for collaboration among colleagues, vendors, and academia to reveal new innovations, solutions, ideas, and emerging technologies in Environmental Science.