



It's in our hands to make the world a better place ...



Air Pollution - A real threat

IPCC REPORT 2021

According to the new IPCC report, humans have caused almost 100% of global warming. Climate science has evolved since the last published IPCC report, the scientists are now much more confident that human influence has caused climate change than they have been before.

Report says "It is quite indisputable that human activities are causing the climate change, making extreme climate events including heat waves, heavy rainfall, and droughts more frequent and severe." What it mainly highlights is the current condition of the changing climate atmospheric concentrations of a range of rising greenhouse gases.

The normal water cycle is assessed to be intensifying, frozen parts of the globe are melting the gigantic ice mountains and the oceans are warming up, to list a few of the indicators, which is clearly visible now.

According to the WHO, more than 1 million premature deaths in China are caused by air pollution every year and India leads the world in pollution related deaths which also crosses more than a million in a year. Air pollution would decrease the lifespan of a human being from 15 to 20 years because it makes innocent people suffer from chronic respiratory and other related diseases including coronary Heart problems, Stroke, Lung cancer etc. Mostly children below the age of five are leading to lifetime diseases and also the people above the age of 60, are being very badly affected . In 2019, 116 000 infants died in India within the first month being born, often a direct outcome of a mothers exposure to air pollution during pregnancy.

Most of the 7 million premature deaths attributed to air pollution by the WHO, originates from various poisonous chemicals emitted by the exhausts of fuel powered vehicles, sandstorms, agriculture, industry, wildfires, burning of fossil fuels, felling of trees to widen roads, construction of new housing and public infrastructure to accommodate migrant workers etc. According to the WHO, India exceeds the limits of small particle pollution by 500%.

Climate change amplify the health risks caused by pollution, due to intense exhaustion of diesel and petrol vehicles, forest fires, Coal firing power plants, burning of agricultural wastes etc. Link with Lung cancer is well established, were excess deaths from air pollution are caused by Heart attacks, Strokes etc.



Save the World



By Going Green

Vision of a Green planet is safe and in balance



Pollution deaths

IPCC REPORT 2021

While these findings no doubt give us a deep sense of impending doom, they come at an important time in the human history, a most crucial time when environmental consciousness is at an all time high. It's unfortunate that many governments continue to brush environmental concerns under the carpet.

The report directly charts how our actions over the years have led to where the environment is today. It categorically states that human induced greenhouse gas emissions are the main driver of the observed changes in hot and cold extremes on the global scale and on most continents.

Adding to these disasters, the temperature changes are further amplified at the regional scale by regional processes such as soil moisture or snow ice albedo feedbacks, land use and land cover changes or particles of aerosol concentrations, etc.

India leads the world in pollution related deaths, followed by China and Nigeria. As India is on the path of development, millions of new vehicles are on the roads and the lack of electric vehicles along with more coal firing power plants have made India the leading country in the world regarding pollution related deaths. New Delhi which is the most polluted capital city in the world is made significantly worse by its location, in the heart of India's agricultural region where rife stubble burning makes fumes that pollute swathes of northern India and add to Delhi's toxic haze in addition to lakhs of fuel powered vehicles.

Although the Government of India has adopted certain measures to promote electric vehicles, it has not gained much popularity due to the lack of charging infrastructures and the lack of awareness among the common man about the importance and economic benefits of using electric vehicles. Moreover, emissions from fuel powered vehicles, especially small and larger Particulate matter, Nitrogen dioxide, Sulphur dioxide and Ozone have likewise been linked to drops in cognitive performance, labour productivity and educational outcomes.

1.7 Million Pollution death

In India itself more than 1.7 million people have died due to the effects of air pollution in the year 2019 only. This is really a shocking information but nothing serious is being done to tackle these issues much faster. Along with millions of deaths, billions of people are affected with chronic diseases too.



GREEN EVANGELIZATION MOVEMENT

Air pollution is an universal disaster



Biggest Polluters - 1

The World Meteorological Organisation has recorded during the year 2021 that, the concentration of Carbon dioxide in the atmosphere broke all records in the history of humanity. Specifically, the concentration reached 407.8 parts per million, which represents almost a 47% higher level than the period before Industrial Revolution ie before 1750's

However, the most part of this pollution comes from just a few countries. China, for example, generates around 30% of all global emissions, while the United States is responsible for almost 14%. In the ranking below you can find the countries that produce the most emissions, measured in millions of tons of Carbon dioxide emitted in a year . Here are the most polluted countries on the base of Carbon emissions.

Most Polluted Countries

1. China, with more than 10,065 million tons of CO₂ released.
2. United States, with 5,416 million tons, 3. India, with 2,654 million tons
4. Russia, with 1,711 million tons, 5. Japan, 1,162 million tons, 6. Germany, 759 million tons , 7. Iran, 720 million tons, 8. South Korea, 659 million tons, 9. Saudi Arabia, 621 million tons, 10. Indonesia, 615 million tons of Carbon dioxide.

Among the most polluted countries on the basis of the Particulate matter emitted, Bangladesh emerged as the country with largest pollution followed by Pakistan, Mongolia, Afghanistan , India, Indonesia, Bahrain, Nepal, Uzbekistan, Iraq and so on.

IPCC REPORT 2021

It estimates irrigation and crop expansion to have increased summer temperatures in some regions such as the U.S. Midwest and importantly, urbanisation appears to have become more temperature extremes in cities.

While such events have been edged on by human induced climate change, it is most likely to continue to increase with further global warming. Frequent heat waves, droughts, flash floods, and other disasters are proof.

United states, Europe and Asia, or the polar regions and smaller islands, the report is clear that every part of the world is bound to be affected by climate change. Specifically in Asia, the marine heatwaves continue to increase, fire weather seasons will lengthen and intensify, heavy rains will amplify, shorelines will retreat and coastal areas will sink, especially the coastal cities with initial threat.



HEAL THE
WORLD

DESTROY
EGO
ON

When we heal the earth by going green, we heal ourselves



IPCC REPORT 2021

For those who refused to believe in climate change, the news is officially out there now. For starters, governments need to ensure that the efforts and millions spent on climate action actually deliver the much needed results.

A recent German climate publication explains that the German way has long been to spend many billions on climate action without paying attention to the effects achieved. The use of funds and the effect on climate protection as of today's situation are blatantly disproportionate.

The absurdly high funding for the expansion of renewable energies over many years has become a legend. When switching to electro mobility, politicians are in the process of repeating the same mistake. These pathetic comments stand true for other governments universally too and a quick action is required.

Biggest Polluters - 2

Each year more than 36,000 million tons of Carbon dioxide are released into the Earth's atmosphere, and it is the main source of the Greenhouse gases that contribute to climate change. These gases generate from fossil fuels, the generation of energy through non-renewable channels and polluting human activities. Most of the polluted cities in the world are in India including the most polluted capital city in the world, New Delhi.

Most Polluted 50 Cities in the World

1. Hotan, China
2. Ghaziabad, India
3. Bulandshahr, India,
4. Birsakh Jalalpur,
5. Bhiwadi, India,
6. Noida, India,
7. Greater Noida, India,
8. Kanpur, India,
9. Lucknow, India,
10. Delhi, India,
11. Faridabad, India,
12. Meerut, India,
13. Jind, India,
14. Hisar, India,
15. Kashgar, China,
16. Manikganj, Bangladesh,
17. Agra, India,
18. Lahore, Pakistan,
19. Bahawalpur, Pakistan,
20. Muzaffarnagar, India,
21. Fatehabad, India,
22. Bandhwari, India,
23. Dhaka, Bangladesh,
24. Gurugram, India,
25. South Tangerang, Indonesia,
26. Yamuna Nagar, India,
27. Rohtak, India,
28. Muzaffarpur, India,
29. Faisalabad, Pakistan,
30. Dharuhera, India,
31. Singrauli, India,
32. Patna, India,
33. Coraut, India,
34. Kurukshetra, India,
35. Jodhpur, India,
36. Alampur, India,
37. Vapi, Indi,
38. Fatehgarh Sahib, India,
39. Kaimla, India,
40. Guwahati, India,
41. Gujranwala, Pakistan,
42. Kutail, India,
43. Muridke, Pakistan,
44. Anyang, China,
45. Gwalior, India,
46. Belpahar, India,
47. Puyang, China,



Agitations to reduce human made pollution is growing to save the Planet



Two killers in the Air

IPCC REPORT 2021

In addition to the latest transformational policies, we need to seriously tap into the renewable energy sources. Reducing the unsustainable and polluting power sources is not enough, we need to do away with them completely given the dire state of affairs.

Governments should also develop these policies in close dialogue with corporate climate leaders who are working to reduce emissions because they can bring immense insight and innovation to the net-zero transition idea.

Low-Carbon activities in the middle of pandemic recovery should be done by stopping fossil fuel subsidies, putting a price on Carbon, and making climate related financial disclosure mandatory. Humans might be the main reason for disasters of environmental degradation but, ironically the ideal human centric measures can also be the solution.

It's shocking to know that most of the world's top polluted cities are in India where deadly polluted air and Covid - 19 virus, the two giant invisible killers who have many similarities between each other are putting millions of people at risk, just by breathing them. Deadly peril is smothering our cities, killing four times as many people in one year than Covid - 19. Across the world nearly nine million people died from air pollution in 2018, and in India, it claims the life of one child every three minutes. The peril is air pollution and the victims have died simply by breathing in the air around them.

Fossil fuels are the source of toxic fog engulfing the cities. polluted greenhouse gas emissions from coal, oil and gas are simultaneously forcing global warming, while doing a hit and run number on city populations through the release of tiny poisonous particles which penetrate deep into the Lungs leading to Lung cancer, Coronary heart disease, Strokes and early death. The smallest particles are considered especially dangerous to human health because they get through many of our bodies' defences such as nose hair or mucus. It is our harsh reality that millions are breathing in this deadly atmosphere and we have no control over the effects of this situation yet.

Therefore, keeping this pain in mind we initiate our first step by replacing the fuel powered vehicles with electric vehicles along with promotion of customised solar panel designed roofing and solar panels in agricultural fields to produce electricity.



I DON'T WANT TO BE
THE **LAST GENERATION.**
CORONAVIRUS WON'T
BE THE ONLY DEMON THAT
WILL COLLAPSE MY LUNGS.

Another demon that kills us is the poisonous pollutants from fossil fuels



Covid-19 and Air Pollution

IPCC REPORT 2021

Tapping into the modern indigenous knowledge and latest methods of green technology investments is perhaps a very good place to start. The recent advancements in the organic farming, afforestation, water conservation, energy, urban design, and more have shown exceptional results.

Taking them seriously would not just help to create a tremendous talent pool, but also pave the way for much needed environmental change. Every minute change starts off small and revisiting this philosophy rather than bogging the feeling of public, down with unfathomable statistics and latest scientific jargon is what we need.

Advances in recent climate science and improvements in analytical tools are crucial. Progress in our understanding of human influence is gained from the longer observational dataset.

The more tiny dangerous particles from Carbon emissions, the more will be the problems to human life because it affects the respiratory system leading to chronic diseases. The recent Covid - 19 is also the same where the virus which is invisible to the human eye, that has shaken the whole world, is also affecting the respiratory system initially, but what is worth noting is the effect of air pollution is much more complicated and dangerous than Covid-19 which also affects the human respiratory system.

As Covid-19 is ravaging globally, many studies have linked air pollution to be a elevating factor to Covid-19 case numbers and deaths. The difference is that Covid-19 patients get worse faster and for many it cures faster also because its a virus which is having life and will be dead within a few days but air pollution is a slow poison which creates lifetime diseases because it does not have life or death and continues to live with us throughout our lives. It takes more time for the worst and even more time to get permanently cured from the chronic respiratory diseases resulting from air pollution. Both are equally dangerous for children as well as aged people over the age of sixty.

Moreover the mortality rates due to air pollution is so huge when compared to the loss of lives in the recent ongoing Covid-19 pandemic, proving that air pollution is such a greater disaster than the virus. If we had taken the same precaution, care and importance given for Covid-19, then air pollution could have been reduced to a great extent.



Air pollution is a man made obstruction leading to Lung destruction



Pollution deaths saved

IPCC REPORT 2021

Improved palaeo-climate based information, much more stronger warming signals with improvements in climate models, improved physical understanding and attribution techniques are some of the advances outlined in the report.

The attribution to human influence has become possible across a wider range of climate variables and climatic impact drivers. The new techniques and analyses drawing on several lines of evidence have provided greater confidence in attributing changes in regional weather and climate extremes to human influence.

Human activities have warmed the planet at a rate never seen before in the planet's long history of the past 2,000 years in particular. The IPCC report found that the Earth's global surface temperature warmed by 1.09°C when the previous situation was compared between 1850-1900.

When there was a forceful global lockdown due to the Covid-19 pandemic, millions of lives were saved from the disasters of air pollution due to the absence of fuel powered vehicles on road and factories without operation which used to cause maximum air pollution.

So the reality is that Covid-19 has saved millions of lives globally that occur due to direct or indirect effects of air pollution which clearly shows that its high time to replace petrol and diesel vehicles with electric vehicles, coal power plants with solar power plants, concrete roofings with solar panel roofings, alternative for burning of agricultural wastes etc.

It's very clear that the recent lockdown in the middle of the Covid -19 pandemic has saved many lives from the drastic effects of air pollution because the year 2019 without any lockdown had nearly 1.7 million deaths due to air pollution in India which was shocking but there was not even half the deaths reported in the year 2020 due to air pollution which had several days of lockdown that has considerably reduced transportation, construction and functioning of factories to a great extent.

We hope that our positive steps will reduce air pollution at the earliest and thereby save millions of lives along with the billions affected by chronic respiratory and other related diseases. In addition to that, it will also save the universe as a whole from the tragic effects of climate change caused due to air pollution.



Lockdown during pandemic has saved millions of air pollution deaths



Pollution effects on health

IPCC REPORT 2021

Mostly the least developed countries, which are also among places that will bear the worst brunt of global warming, threw their weight behind the 6th Assessment Report released by the latest IPCC report.

“Alarm bells are ringing, I hope everyone is hearing them,” said Sonam P Wangdi, chairman of the group of the 46 least developed countries, shortly after the much awaited report on the science of climate change since the year 2013 was released by the Intergovernmental Panel on Climate Change

Among the findings of climate change 2021, there has been a 40 percent decrease in Arctic sea ice since 1979 and with every one degree celsius rise in temperature, there will be 7° increase in the intensification of extreme rain events. This fast pace of melting ice will be really devastating.

Breathing in polluted air can be very harmful for our health, it can lead to loss of life or permanent damages caused by chronic respiratory diseases. Long term exposure to air pollution has been associated with diseases of the Heart, Lung cancers and other severe respiratory health problems. Even healthy people can be affected by the hazardous impact of polluted air, that can cause respiratory diseases or breathing difficulties during exercise or outdoor activities.

Your actual risk of adverse effects depends on your current health status, the pollutant type and concentration, and the length of your exposure to the polluted air. High air pollution levels can cause immediate health problems including aggravated Cardiovascular and respiratory illness, added stress to Heart and Lungs, which must work harder to supply the body with Oxygen, damaged cells in the respiratory system etc. Long-term exposure to polluted air can have permanent health effects such as accelerated aging of the Lungs, loss of Lung capacity and decreased Lung function, development of diseases such as Asthma, Bronchitis, possible Cancer, shortened life span etc.

Those who are most susceptible to severe health problems from air pollution are individuals with Heart disease, Coronary artery disease or congestive heart failure of individuals with Lung diseases such as Asthma, Emphysema or chronic obstructive pulmonary disease, pregnant women, outdoor workers, older adults and the elderly children under age the age of 14 etc.



WE CAN'T DRINK
OIL
WE CAN'T BREATHE
£ MONEY £



It's a suicidal situation as we are forced to breathe polluted air



Aerosols and Air Pollution

IPCC REPORT 2021

The IPCC analysed future climate projections from the dozens of climate models, on our earth produced by more than fifty modelling centres in the world. The global average surface temperature rises between the existing pre-industrial levels for the lowest and highest emission scenarios.

The exact increase of rise in temperature that the world experiences will depend on how much more greenhouse gases are emitted. The report states, with high certainty, that to stabilise the climate, Carbon emissions must certainly reach net zero, and other greenhouse gas emissions must decline significantly.

We also know, that for a specific temperature target, there is a finite amount of pollutant which is dangerous Carbon that we could be emitting before reaching safest target of net zero emissions.

NASA uses satellites orbiting the earth to keep an eye on air pollution. In fact, air quality forecasters use information about aerosols from NASA's Aqua, Terra and Suomi satellites. NASA is also developing a new instrument called the Multi Angle Image for Aerosols as a future spacecraft mission. It will help scientists understand the size, makeup and quantity of aerosols in our air.

Air pollution is caused by solid and liquid particles along with certain gases that are suspended in the air, which normally comes from the exhaust of fuel powered vehicles, factories, dust, pollen, mold spores, volcanoes, wildfires and so on. The solid and liquid particles suspended in our air are called aerosols. Air pollution happens when solid and liquid particles called aerosols and certain gases end up in our air. These particles and gases are not good for the planet and for our health, so keeping track of them is important.

Any particle that gets picked up into the air is formed from chemical reactions in the air that can result as Aerosol. Many Aerosols enter the atmosphere when we burn fossil fuels such as petroleum coal and wood. Humans must soon reduce Carbon dioxide and Aerosol pollution simultaneously to avoid weakening the ocean's ability to keep the planet cool. Aerosols cause poor air quality and lead to premature deaths. However, these particles have a net cooling impact on the climate, so when you cut them that leads to a net warming effect. We have started experiencing these changes as day by day it's becoming hotter and hotter.



The basic right of a human being is to get clean air to breathe...



Toxic Pollution related diseases

Toxic pollution is among the leading risk factors for non-communicable diseases globally. Non-communicable diseases account for 72% of all deaths, 16% of which are caused by toxic pollution. Toxic pollution is responsible for 22% of all Cardiovascular disease, 25% of Stroke deaths, 40% of Lung cancer deaths, and 53% of deaths from chronic obstructive Pulmonary disease. As poisonous fossil fuels from the transportation sector account for more than 60% of toxic air pollution, an alternative for fuel will solve more than half of the air pollution crisis.

Competition for Pollution

The issue surrounding diesel and petrol engine pollution is very common. There was a perception initially that diesel engines pollute less, but today we blame diesel engines for polluting more. Diesel engines emit less Carbon dioxide and greenhouse gases than petrol engines because of the particular type of fuel and the internal efficiency of the diesel engine. More specifically, the fuel used in diesel engines has a higher compression ratio than petrol and it also performs better than petrol engines.

Both petrol and diesel may compete with each other as to which is the largest polluter but the fact is that both cause the greatest destruction as far as air pollution is concerned. It's high time that an alternative has to be on roads at the earliest. Whether it is petrol or diesel the consumption of both has to stop with utmost urgency to save the lives of innocent people.

IPCC REPORT 2021

Apart from that Carbon dioxide concentration has been the highest in at least 2 million years. The report flagged that unless there are immediate, rapid and large scale reductions in the rising greenhouse gas emissions, limiting warming to close to 1.5°C will be beyond reach.

The report comes as yet another stark warning, and the science is even more clearer. It's shocking that Global greenhouse gas emissions continue to rise, the climate crisis is worsening, and the impacts will be devastating.

We must act quickly now, to urgently limit warming and prepare our communities for the impacts to come. The report flags several alarming facts about climate change. The last four decades have been successively more warmer, global surface temperature rising high means sea level has increased, and global Glaciers are retreating fast.





CLIMATE CHANGE
swp.org.uk

DON'T BE A
FOSSIL
FOOL

It's really foolish to buy a new vehicle using fossil fuels when the alternative has arrived.