



THE GLOBE IS UNDER CLIMATIC STRESS



STRESSED ECOSYSTEM

- The intergovernmental panel on climate change (IPCC) reported in their latest 2022 report the severe effects expected to happen when the global temperatures rise by 1.5 C.
1. Heat waves will impact at least 14% of people when severe heat occurs globally once every 5 years minimum. If the earth warms just .1°C from the current target of 1.5°C, wildfires will burn almost 35% more land globally than the damage made today.



AUSTRALIAN BUSHFIRES



2. Rising seas will submerge tens of millions of people living in coastal areas and small islands will vanish. It is noted that 1 billion people will face coastal flooding from rising seas. More people unfortunately will have to leave their homes by sea level rise and flooding. Some islands will be uninhabited if the global temperature rises by few more tenths of a degree than the current goal temperature.



VIDEO OF ALEXANDRIA




3. Droughts and floods will impact food security.

4. Arctic ice thaws is expected and 40% of the Arctic's permafrost will severely be affected by the end of the century.

5. Spices , plants , insects and other living organisms will be at the risk of extinction.





Naturally, the impact will be greater, and the damage is more severe if the 2C threshold is reached. No nation or region or country no matter how big it is, and how strong it can be will be exempted from the effects of climate change. The IPCC broke out its findings and key risks by region. Unfortunately, Africa has contributed the most to greenhouse gas emissions. Yet the key development sectors have already experienced widespread losses and damages, including biodiversity loss with our shortages and food production and loss of lives. Not less than 100 million people in Africa will be exposed to rising sea levels by the year 2030 compared to half of that 20 years ago. Asia is also the same and has been hard hit by climate-related disasters. The IPCC report noted that among 13 developing countries with large energy consumption in Asia, particularly, 11 are exposed to high energy and security and systematic risks. Developing and underdeveloped countries are forced to seek loss and damage support from developed, industrialized countries.

LOSS AND DAMAGE FINANCE

Loss and damage finance has always been one of the most continuous issues on the negotiation table at COPs. For over three decades, or so developing countries that are at the forefront of experiencing the devastating climate disasters have been demanding that developed nations, the largest emitter of greenhouse gases compensate them for the harm they are facing due to climate change.

The fund is a crucial, starting point to rectify a long, systematic injustice to vulnerable communities . But how optimistic should we be that this fund achieves, its noble purpose of helping those in fragile situations due to climate change? Some observers believe the fund is another empty promise made by the developed nations to ease the pressure they are facing Given that the much awaited one hundred billion US dollar a year that wealthy nations promised in 2015 to provide for developing nations has not yet materialized, it would be unrealistic to expect them to pour their money into this new venture.

Even the United Nations, Secretary António Guterres was cautious while announcing his support to the new fund as he tweeted “Clearly this will not be enough, but it is a much-needed political signal to rebuild broken trust “

VIDEO OF MAALIMIN



EMISSIONS GAP REPORT

On the eve of COP 27, the Emissions Gap Report, 2022 highlighted that countries that have made climate commitments were moving slowly with their implementation, putting the world on trajectory for disastrous 2.8°C rise in the temperature by the end of the century. Even if the current pledges were met, we would still face temperature rise of 2.4 to 2.6°C by the end of the 2100.

That should have been enough for a motivation for those who make concrete progress in the climate agenda so the world can avoid catastrophe that is so clearly looming ahead.

Nonetheless, according to the 2022 IPCC report;; the future is looking pretty bleak at least 3.3 billion people's daily's life will be affected or as the reports indicate highly vulnerable to climate change, and people are 15 times more likely to die from extreme weather than in the years past. It is estimated that between 2030 to 2050 climate change will cause an additional 250,000 deaths annually. High temperatures rise the levels of ozone and other pollutants leading to 1.2 million deaths due to cardiovascular and respiratory disease annually.

MITIGATION AND ADAPTATION

Demonstrating solidarity with those hit hardest by climate change, therefore, should be at the heart of our collective response the world is watching and waiting, waiting for actions not for promises . by the year 2030 climate impact will cost developing countries an estimate between \$290 billion and \$580 billion annually. The cost will be more than doubled by the year 2050 the US and the EU historically the worlds biggest in meters claim that any compensation would open the door for and then ending litigation. A new term was introduced in climate change literature, which deals with combating climate disasters. This term is known to us today as mitigation and adoption.



Mitigation involves reducing the flow of heat, trapping greenhouse gases into the atmosphere.

The goal is to reduce the impact of these potent gases from interfering with earth's climate that is stabilizing greenhouse gas levels in the atmosphere, sufficient to be adapted and allow our ecosystem to be able to survive.

Enhancing the sinks and finding new alternatives to the existing greenhouse gases. Clean energy substitutes like green hydrogen fusion, and fission and other sources of energy were introduced.

Adaptation, however, involves adjustment to the actual expected disasters. The goal, in fact, is to reduce the risks from harmful impacts of climate change. With adaptation technologies were introduced. Adapting to climate change however and its impact are costly. \$140-\$300 billion a year is the current indicator of estimates. The climate finance scheme agreed-upon in Copenhagen, COP15, of a hundred billion US dollars to be provided by the developed countries to help undeveloped countries, mitigating and adapting the impact of climate change is yet to be met.

As part of the mitigation and adoption, we suggest looking into the following:

One : greenhouse gases have the potential of warming the atmosphere. Each guess, however, has a different ability and amount of warming and different duration of being active in the atmosphere. The global warming potential is a term used to indicate the amount of warming in a specific duration.(normally 100 years.) if these gases were replaced or removed from our daily usage remarkable decrease in the global warming, will definitely be achieved

	Greenhouse Gas	Global Warming Potential (GWP)
1.	Carbon dioxide (CO ₂)	1
2.	Methane (CH ₄)	25
3.	Nitrous oxide(N ₂ O)	298
4.	Hydrofluorocarbons (HFCs)	124 – 14,800
5.	Perfluorocarbons (PFCs)	7,390 – 12,200
6.	Sulfur hexafluoride (SF ₆)	22,800
7.	Nitrogen trifluoride (NF ₃) ³	17,200

Two : The environment and construction industry represent about 40% of GHG emissions. Building construction and the process of managing it should be considered as a major source of potent gases enabler. Environmental social governance.(ESG.) should be considered as mandatory measures in that specific industry. The rational, usage of material and services such as water, heating air conditioning and fuel consumption within the industry will help great deal, in reducing global warming.

Three: part of the finance scheme agreed - upon in cop 27 in Egypt should be allocated to research institutions worldwide to assist in combating global warming.