THE CLIMATE CRISIS – A RACE WE CAN WIN

Climate change is the defining crisis of our time and it is happening even more quickly than we feared. But we are far from powerless in the face of this global threat. As Secretary-General António Guterres pointed out in September, "the climate emergency is a race we are losing, but it is a race we can win".

No corner of the globe is immune from the devastating consequences of climate change. Rising temperatures are fueling environmental degradation, natural disasters, weather extremes, food and water insecurity, economic disruption, conflict, and terrorism. Sea levels are rising, the Arctic is melting, coral reefs are dying, oceans are acidifying, and forests are burning. It is clear that business as usual is not good enough. As the infinite cost of climate change reaches irreversible highs, now is the time for bold collective action.

GLOBAL TEMPERATURES ARE RISING

Billions of tons of CO2 are released into the atmosphere every year as a result of coal, oil, and gas production. Human activity is producing greenhouse gas emissions at a record high, with no signs of slowing down. According to a ten-year summary of UNEP Emission Gap reports, we are on track to maintain a "business as usual" trajectory.

The last four years were the four hottest on record. According to a September 2019 World Meteorological Organization (WMO) report, we are at least **one degree** Celsius above preindustrial levels and close to what scientists warn would be "an unacceptable risk". The 2015 Paris Agreement on climate change calls for holding eventual warming "well below" two degrees Celsius, and for the pursuit of efforts to limit the increase even further, to 1.5 degrees. But if we don't slow global emissions, temperatures could rise to **above three degrees Celsius by 2100**, causing further irreversible damage to our ecosystems.

Glaciers and ice sheets in polar and mountain regions are already melting faster than ever, causing sea levels to rise. Almost **two-thirds of the world's cities** with populations of over five million are located in areas at risk of sea level rise and almost 40 per cent of the world's population live within 100 km of a coast. If no action is taken, entire districts of New York, Shanghai, Abu Dhabi, Osaka, Rio de Janeiro, and many other cities could find themselves underwater **within our lifetimes**, displacing millions of people.

FOOD AND WATER INSECURITY

Global warming impacts everyone's food and water security. Climate change is a direct cause of soil degradation, which limits the amount of carbon the earth is able to contain. Some 500 million people today live in areas affected by erosion, while up to **30 per cent** of food is lost or wasted as a result. Meanwhile, climate change limits the availability and quality of water for drinking and agriculture.

In many regions, crops that have thrived for centuries are struggling to survive, making food security more precarious. Such impacts tend to fall primarily on the poor and vulnerable. Global warming is likely to make economic output between the world's richest and poorest countries **grow wider**.

NEW EXTREMES

Disasters linked to climate and weather extremes have always been part of our Earth's system. But they are becoming more frequent and intense as the world warms. No continent is left untouched, with heatwaves, droughts, typhoons, and hurricanes causing mass destruction around the world. **90 per cent** of disasters are now classed as weather- and climate-related, costing the world economy **520 billion USD each year**, while 26 million people are pushed into poverty as a result.

A CATALYST FOR CONFLICT

Climate change is a major threat to international peace and security. The effects of climate change heighten competition for resources such as land, food, and water, fueling socioeconomic tensions and, increasingly often, leading to **mass displacement**.

Climate is a **risk multiplier** that makes worse already existing challenges. Droughts in Africa and Latin America directly feed into political unrest and violence. The World Bank estimates that, in the absence of action, more than **140 million people** in Sub-Saharan Africa, Latin America, and South Asia will be forced to migrate within their regions by 2050.

A PATH FORWARD

While science tells us that climate change is irrefutable, it also tells us that it is not too late to stem the tide. This will require fundamental transformations in all aspects of society — how we grow food, use land, transport goods, and power our economies.

While technology has contributed to climate change, new and efficient technologies can help us reduce net emissions and create a cleaner world. Readily-available technological solutions already exist for more than **70 per cent** of today's emissions. In many places renewable energy is now the cheapest energy source and electric cars are poised to become mainstream.

In the meantime, nature-based solutions provide 'breathing room' while we tackle the decarbonization of our economy. These solutions allow us to mitigate a portion of our carbon footprint while also supporting vital ecosystem services, biodiversity, access to fresh water, improved livelihoods, healthy diets, and food security. Nature-based solutions include improved agricultural practices, land restoration, conservation, and the greening of food supply chains.

Scalable new technologies and nature-based solutions will enable us all to leapfrog to a cleaner, more resilient world. If governments, businesses, civil society, youth, and academia work together, we can create a green future where suffering is diminished, justice is upheld, and harmony is restored between people and planet.

FOR MORE INFORMATION

- **The Sustainable Development Goals**
- **Climate Action Summit 2019**
- **UNFCCC | The Paris Agreement**
- **WMO | Global Climate in 2015-2019**
- **UNDP | Global Outlook Report 2019**
- **UNCC | Climate Action and Support Trends 2019**
- **IPCC | Climate Change and Land 2019**
- **UNEP | Global Environment Outlook 2019**
- **UNEP | Emission Gap Report 2019**