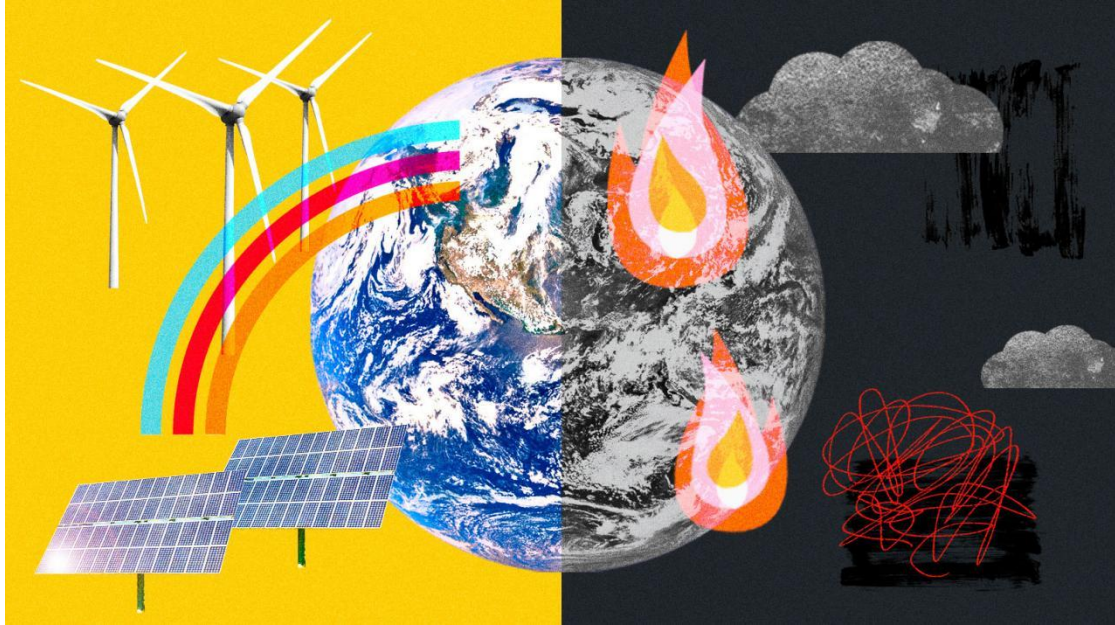


Climate change calls for local change

Catherine



Humans, we are main the cause of climate change, yet the main solution as well.

Introduction

As smoky gray fumes sprout up in the sky, somewhere else in the world hungry forest fires scorch and burn the ground to a crisp. Collapsing glaciers and thawing ice caps, leaving impoverished polar bears stranded. Rising sea levels creating floods and erosion, breeding waterborne diseases and parasites. Catastrophic hurricanes and storms taking lives, displacing millions, and damaging many homes. Sounds familiar? In fact these are just some of the devastating consequences of climate change. Humans and animals and plants alike, all in crisis, but why?

International Emergency

Earth's climate has been heating up rapidly in recent years, at alarming rates affecting life at local, regional, and global scales. Multiple sources like Environment Canada confirm climate change as a mainly anthropocentric problem. The fossil fuels such as oil, coal, and gas, we rely so heavily on for energy, transportation, and industrial activities, release harmful greenhouse gases. The "greenhouse effect" is a natural layer of insulation, utilizing the atmosphere to absorb heat from the sun. However the accumulation of greenhouse gases such as carbon dioxide, methane, nitrous oxide etc, trap much more heat than needed.

As a result, Earth is roughly 1.2°C warmer than it was in the late 1800s, and the last decade (2010-2020) was the warmest on record. According to the Intergovernmental Panel on Climate Change (IPCC), more than 1 300 scientists worldwide forecast a temperature rise of 2.5-10 degrees Fahrenheit over the next century. In fact Climate NASA informs that all arctic ice will have melted by the summer before 2050, and sea levels will rise by 1-8 ft in the next century. Tropical storms and cyclones will also become more devastating, and Atlantic hurricanes are estimated to increase in intensity, frequency, and duration. Furthermore the United Nations conclude that while biodiversity levels will continue to dwindle, the number of climate refugees will only increase.

Solutions, starting near you

Ontario has achieved and continues to plan reductions from 1990 emission levels, of 15% in 2020, 37% in 2030 and 80% in 2050. Whereas the Ontario Climate Consortium (OCC) strives to provide the public and government with consistent climate information and climate risk assessment. Additionally the city of Toronto plans to mitigate the majority of its emissions by transitioning into renewable energy, investing in sources like solar, wind, hydro, geothermal power etc, and making changes towards green infrastructure.

Currently Ontario is collaborating with organizations such as Partners in Project Green, to reduce energy and resource costs and engage investors. The Toronto Region Conservation Authority (TRCA) has created programs like the Sustainable Neighborhood Action Program (SNAP), to engage communities towards climate change resilience action. Showcasing innovative solutions through exploring clean energy, building carbon sinks, and seeking co-benefits between nature and civilization.

At the University of Toronto students and professors alike are committed to climate positive action. Responsible management of campus growth and the administration of carbon budgets, helps ensure the 2030 goal of a 37% emission reduction, and the goal of net zero emissions by 2050. While implementing sustainable infrastructure with renewable energy and Geo-exchange, creates resilient and flexible systems.

Individual Initiative

If governments, politicians, and agreements still aren't doing enough, how can I help combat this global dilemma? The answer is personal action, starting with smart decisions and changes in one's own life. Carbon footprint is an ecological mark, produced by the accumulation of greenhouse gas emissions released from your everyday choices. From the food you eat, to clothes you wear, even the electronic devices you're using now, they all profoundly impact the environment. Even if one person can't right all the wrongs, only with personal action will there be collective action, and ultimately systemic change.

Turn off your lights, pull out the plugs, and walk or bike to school. The energy sector (heat, fuel, electricity etc) contributes greatly to greenhouse gas emissions, responsible for approx. 35% of

total emissions. Another quick tip is to finish everything on your plate, because 17% of consumer accessible food is wasted. While you're at it, buy only local and seasonal produce to reduce the impact of shipping, and choose which companies to support. According to the United Nations reusing and donating saves roughly 11.2 billion tonnes of waste collected in worldwide landfills, so remember to reuse, reduce, and recycle. To find out more check out <https://www.un.org/actnow> .

Conclusion

Many get easily overwhelmed by the daunting urgency of climate change, however this fear has allowed us to acknowledge the problem and speak up. The climate interconnects with all aspects of the environment and life itself. By taking climate action we protect life on land and in the water. We implement clean energy and sustainable infrastructure as creative solutions. We promote responsible consumption and production by developing strong partnerships, and collaborating together to achieve our goals. Most of all, throughout the process we ensure the health and well-being of all organisms that call Earth home, now and for many millennia to come.

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