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Climate Change: Re-assessing Current Approaches

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SYNOPSIS

Proposed solutions to climate change are heavily reliant on technological advances. Considering the initial causes of current warming trends that can be traced back to the Industrial Revolution, a shift in consumerism may provide better solutions to climate woes.

COMMENTARY

WHILE THE rise of technology reflects progress in human civilisation, it creates myriad wonders that have, unfortunately, contributed to the crisis in climate change. So deeply entrenched is the grip of technology in our modern life that the current climate woes exacerbated by the Industrial Revolution's technologies are being responded to by another set of technologies.

Renewable energy technology provides cure for fossil fuels' high carbon emissions problem. Carbon capture and storage technology prevent carbon dioxide from entering the atmosphere. Geoengineering promises the manipulation of the Earth's system to reverse climate change effects. More recently, the Fourth Industrial Revolution technologies are joining the bandwagon with blockchain, satellite data, GPS tracking, remote sensing, drones, crowdsourcing, thermal imaging, and artificial intelligence being deployed to address various environmental issues. Will all these technology-enabled possibilities avert our planet from climate-induced catastrophes?

Double-Edged Sword

Such development undoubtedly reflects impressive human ingenuity. It conceals, however, a particular way of thinking that often goes unnoticed and unquestioned: that we can go on doing what we are doing because technologies will clean up after us.

This is concerning on a number of fronts. First, technology is a double-edged sword. While it may be designed for a noble purpose, the consequences of its use are often not fully discernable at the time of its creation. The mid-20th century Industrial Revolution technologies that have brought much economic growth and wealth to different segments of societies provide clear examples.

Not only did they cause sheer air and water pollution, they are also believed to contribute significantly to the ongoing warming trend. Indeed, there is more than 95 percent probability that human activities since the mid-20th century are the reasons for global warming.

What is worrying is that policies often lag behind technological innovations, and will only come into the picture when things start to go awry. The same logic applies to the current technologies offering solutions to climate problems. Who knows for sure what repercussions these technologies have in the future? Such thinking needs to extend beyond the present moment because combating climate change is ultimately about providing livable environment for future generations.

Treating Symptoms Not Root Causes

Second, reliance on technological wonders runs the risk of treating only the symptoms without necessarily addressing the root causes of the problem. As alluded to earlier, the dawn of modernity marked by the Industrial Revolution in the 1800s is responsible for the effects of the current climate crisis.

At the heart of the Industrial Revolution is the production of goods, and behind the production of goods is demand for such goods. Production and consumption thus stand at the very centre of climate problems. Societies' insatiable appetite for new and better quality products and services, regardless of the actual needs for having them, provide opportunities for the production sector to respond by manufacturing more and more products.

This is done with little regard to the Earth's limited capacity to provide for raw materials, and to absorb and process the wastes generated during production and after consumption. Technological development promises to overcome such limits indefinitely, with possible side effects being normalised and treated as accepted risks.

After all, at the consumer end, the pleasure of acquiring dream products and services easily puts climate and environmental worries on the back burner. Putting a break to this unabated appetite is therefore critical to save the planet.

Mitigating Climate Change

Much effort is made to push governments and businesses, particularly the fossil fuel industrial players, to mitigate climate change. Numerous reports are published to show how grievous and urgent the situation has now become. Large-scale public demonstrations are staged in front of world leaders.

Recognising that climate issues directly concern their future, youths are increasingly drawn to participate actively in climate dialogues. Further pressure is placed on

governments and businesses by couching climate change under human rights narrative. The cries levelled against governments and businesses to double up interventions to stop climate change right here and right now, however, will only go so far until and unless societies realise that the solution to climate ailments actually lie in their own hands.

United Nations Environmental Programme's latest report released in late November 2019 presents a sobering picture of the emissions gap that shows no sign of closing in the last decade. Emissions gap refers to the difference between current and projected emissions compared to the acceptable emission levels to achieve Paris Agreement goals.

Regardless of all the things said and done at the international, regional and national levels to cut down greenhouse gas emissions, they have in fact continued to rise at an annual rate of 1.5 percent in the last ten years. With the current trend, temperature rise is likely to exceed the 20 Celsius mark by the end of the century. Among some of the recommendations put forward, which include increasing climate mitigation commitments by more than five-fold, the report calls for a transformation in consumer culture.

What It Means

In more practical terms, this means moderating the purchase of new clothes, bags, cellphones, food, cars and other consumer goods even when societies have the financial means to get them. This also means being mindful of the use of electricity and air-conditioning systems in buildings and homes.

It likewise suggests a careful thinking of holiday and travel plans and frequency in light of the carbon footprint left behind. It points out to the need to weigh life's conveniences and luxury against the strain their production puts on the Earth systems. The circular economy model may attempt to alleviate the problem, but a closer look at it will show that not all generated wastes can be fed back into production processes.

In other words, unbridled consumerism is responsible for waste, pollution, and climate warming problems confronting us today. Admittedly, societies will find placing a limit on themselves more challenging compared to demanding governments and businesses to adopt some kind of technological innovations that will do wonders to solve climate adversity.

On this note, the reflection of the Director-General of the WWF International in the 2018 World Economic Forum's Fourth Industrial Revolution for the Earth is worth mentioning: technological revolution needs to be accompanied by cultural revolution, and this means transforming the way we "produce, consume, and power our lives".

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