

Escalating Emissions Whirling The Existence



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Abstract

Are we too tardy? or is there time to arrest the rollercoaster ride to doomsday predictions? Either way, has the science of *climate change* ever influenced negotiations at climate meets? On May 10 the planet marked a milestone of sorts. Scientists recorded that for every million molecules of air, 400 were of carbon dioxide (CO₂) - the key gas that accumulates over decades in the air and leads to global warming. The figure sent alarm bells ringing. A large section of scientists has long predicted that if the accumulated CO₂ rose above 350 parts per million (about 200 years ago the concentration was 280ppm) it'd trigger catastrophic, perhaps irreversible changes. When the 400ppm mark was reached, global media went into a spin. Scientists and civil society called for swift action to reduce global greenhouse gas (GHG) emissions. Meantime, another debate rages. For the past decade, even as CO₂ concentration and GHG emissions rose dramatically, earth's surface temperatures seem to be stabilizing. Although GHG emissions were rising, global temperatures weren't going up as many predictive models showed.

Keywords: Surface Temperature, Climate Activist, Emission.

Introduction

Real surface temperatures between 2000 and 2010 stayed at the lowest end of the range that scientific models predicted. That meant global temperatures weren't responding to the rise in emissions at the high level as was predicted. This suggested that the climate change juggernaut wasn't hurtling towards humanity at the speed predicted earlier. Climate deniers went to town flaunting the new data that the globe wasn't warming at the predicted rate. The messages ranged from 'Apocalypse postponed to Apocalypse: a mirage'. Then came May 10, the 400ppm limit was breached. Climate activists demanded leaders act fast to cut emissions. Somewhere, both the deniers and the activists got it wrong.

Not scientific facts, but the fact that the world's leadership engaged in negotiations to draw a global regime by 2015 (starts 2020) is climate insensitive. Negotiations under the UN Framework Convention on Climate Change (UNFCCC) never hinged on what science told nations, nor did leaders react as urgently as science urged them to. Had that been so, the 2009 Copenhagen meeting on the back of a calamitous Intergovernmental Panel on Climate Change (IPCC) report would've got the US to agree to urgent emission cuts. It would've forced European Union (EU) to do more and forced China, Brazil, India and South Africa to greater responsibility developed countries waffled, chose to wait till current annual GHG emissions of emerging economies rise and hasten a decision that'll make concerns of equity and justice fade away. Predictably, developing nations peaked or are near peaking emission levels.

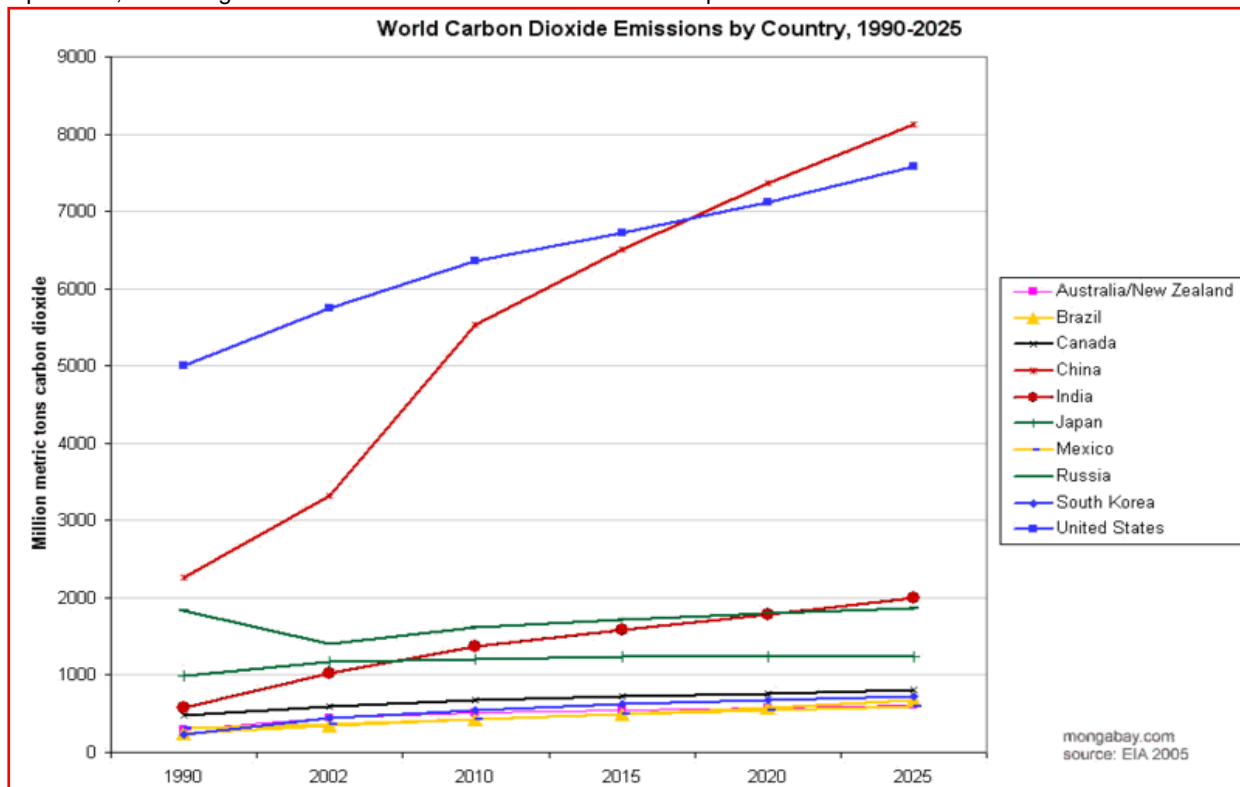
Aim of the Study



Some rich nations have stitched a coalition of the willing, riding the necessity of least-developed countries that thrive through off-shore economies, but are ready to dispense with concerns about justice to quickly cut emissions. That could ensure that if a global agreement in 2015 forces a strong emission-cut regime, the burden-sharing needn't be proportionate to nations' responsibilities. Emerging science may be uncertain of how nature responds to increasing emissions, but there's little doubt temperatures have risen over the last century. Developed nations have stayed from acting climate responsible, building instead resilience to the

challenge of economic competitiveness.

There's a lot of information floating around about climate change. Most people know it has something to do with industrial pollution, changing weather and car exhaust, and they kind of get what Al Gore was trying to say in *An Inconvenient Truth*. But when asked to explain the problem in lay terms, they get tripped up in a lot of verbal stumbling. In a nutshell, climate change occurs when long-term weather patterns are altered — for example, through human activity. Global warming is one measure of climate change, and is a rise in the average global temperature.



How does it happen?

1. Life on Earth is possible because of the warmth of the sun. While some of this incoming solar radiation bounces back into space, a small portion of it is trapped by the delicate balance of gases that make up our atmosphere. Without this layer of insulation, Earth would simply be another frozen rock hurtling through space. CO₂ is the most important gas in this layer of insulation.
2. Carbon is stored all over the planet — in plants, soil, the ocean, and even us. We release it into the atmosphere as CO₂ through activities such as burning fossil fuels (coal, oil and gas) and cutting down trees. As a result, today's atmosphere contains 32 per cent more CO₂ than it did at the start of the industrial era.
3. We have released so much carbon dioxide and other GHGs that our planet's atmosphere is now like a thick, heat-trapping blanket. By disrupting the atmospheric balance that keeps the climate stable, we are now seeing extreme effects around the globe. It's like a thermostat that's gone haywire — it just doesn't work the way it should. The result: the climate changes, and it gets warmer. Extreme weather events also become more common.
4. Global warming has already begun. Since 1900, the global average temperature has risen by 0.6 degrees Celsius, and the northern hemisphere is substantially warmer than at any point during the past 1,000 years.

Who keeps Tab on Climate Change?

Our understanding of climate change is largely the result of the IPCC, the world's most authoritative voice on the topic. Established by the United Nations, the IPCC assesses the scientific and socio-economic information relevant to climate change. The IPCC also looks at the potential impacts of climate change, and options for slowing it down or adapting to it. The IPCC has released several assessment reports over the years. More than 2,500 scientific expert reviewers, 800 contributing authors and 450 lead authors from over 130 countries

contributed to the last one, the Fourth Assessment Report. The Fifth Assessment Report's Working Group I report is expected to be released in 2013. Despite the international scientific community's consensus on climate change, a small number of climate change deniers continue to deny that climate change exists or that humans are causing it.

Conclusion

However, these individuals are generally not climate scientists, and their arguments have been discredited by the scientific community at large. The debate is over about whether or not climate change is real; it is now time to act to solve the predicament.

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