How to Avoid a Climate Disaster: The Solutions We Have and the Breakthroughs We Need

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You likely picture a climate scientist or a climate activist when you think about the author of a book on climate change. The U.S. business magnate and technologist Bill Gates probably is probably not the first name that comes to one's mind! The author of books such as 'The Road Ahead', 'Business @ the Speed of Thought', Gates, in this non-fiction book, now puts forth his take on the issue of climate change, highlighting the role of technology and innovation in climate change mitigation. Interestingly, Gates mentions that he had initially set out to work towards a different goal with the Gates Foundation. He explains that he came into contact with the problem of climate change, while working on the eradication of energy poverty.

The book was originally published on the 16th of February 2021. For one week in the month of October 2021, Bill Gates made his book free to download for all college students, as he believes that the next generation will lead the fight against climate change. Currently, the paperback edition can be purchased on Amazon by Indian readers, for a price of ₹1,069.

The book is divided into five parts, preceded by an introduction. The first three chapters make up the first three sections of the book, while Section 4 comprises Chapters 4 through 9, and the fifth section comprises Chapters 10 through

12. Gates begins the book with a reality check on where we are and where we need to be in terms of greenhouse gas emissions, in the introduction entitled, '51 billion to zero'. This is followed by an optimistic view on why he believes that this mammoth task is achievable. It leaves the reader curious about what possible solutions Gate may propose later in the book.

Using the analogy of a bathtub, Gates makes a compelling case for why it is critical to achieve net zero emissions as soon as possible. However, taking a more realistic approach to the issue, he suggests that even though a complete reduction in emissions may not be possible, the world should aim to lower emissions as much as possible in order to slow down the rate of climate change. Drawing parallels between the COVID-19 pandemic and the climate change, Gates attempts to draw attention to the threats and losses that will accompany even a slight rise in the average global temperature.

In the first chapter, Gates makes a potent argument about the pressing need to bring carbon emissions down to zero. The second chapter highlights the omnipresence of fossil fuels in modern civilisation, followed by a brief explanation of the difficulties of switching to an alternative source of energy. In Chapter 3, Gates clarifies the basic concepts related to climate change mitigation without depending on heavy jargon, making the book a helpful informational source for anyone looking to understand the concept of climate change. He elaborates on a five question framework, designed to help understand the complicated statistics related to climate-change-related policies.

If you have ever wondered why the world does not directly switch to zero-carbon energy sources, Gates answers your queries in Chapter 4. Talking about Green Premiums that make it difficult to get rid of the fossil fuels that harm the environment but benefit the economy, in the chapters that follow he discusses the technologies that are available at present to combat climate change and how innovations can help develop technologies that are environment-friendly and can compete with the reliable, currently abundant, cheaper fossil fuels. The fifth section (Chapters 10 through 12) is focused on policy recommendations for governments across the globe, followed by suggestions for people from all

different walks of life on the steps that can be taken by each of them to help mitigate the climate crisis.

The reader-friendly style of writing, supported with ample evidence, adds credibility to the arguments regarding climate change mitigation that Gates brings to the table. Occasionally, in the book, he candidly mentions some of the challenges he encountered while getting himself acquainted with the topic of climate change. Additionally, he describes how he overcame these challenges, making the book more relatable for the readers and guiding climate change novices in their journey ahead.

Anyone who reads this book would certainly remember some key points regarding climate change. The first one being the figure of 51 billion: the 51 billion tonnes of carbon dioxide emissions that are to be reduced to zero in less than three decades. The second one is the five-question framework that Gates proposes. It focuses on the total amount of emissions that can be reduced, the need to reduce emissions from the five primary carbon-emitting sources, the amount of power that can be generated from a proposed clean energy source and the space required, as well as the costs associated with the same. The five question framework could serve as a useful tool to better comprehend the utility of proposed climate mitigation projects.

The book does a fine job of debunking some popular misconceptions surrounding the problem of climate change. Overall, the book is a must-read for climate change novices and advocates. It helps novices in making sense of the conversations surrounding climate change while also chalking out a basic layout for actions that can be taken by consumers, employers or employees, and governments to play their role in mitigating the impending climate disaster.