



[PDF] What We Know About Climate Change (The MIT Press)

Thank you very much for downloading **What We Know about Climate Change (The MIT Press)**. Maybe you have knowledge that, people have look numerous time for their favorite books subsequent to this What We Know about Climate Change (The MIT Press), but stop in the works in harmful downloads.

Rather than enjoying a good PDF later than a mug of coffee in the afternoon, instead they juggled later some harmful virus inside their computer. **What We Know about Climate Change (The MIT Press)** is simple in our digital library an online permission to it is set as public suitably you can download it instantly. Our digital library saves in combined countries, allowing you to acquire the most less latency era to download any of our books later than this one. Merely said, the What We Know about Climate Change (The MIT Press) is universally compatible subsequent to any devices to read.

What We Know about Climate Change-Kerry Emanuel 2018-10-09 An updated edition of a guide to the basic science of climate change, and a call to action. The vast majority of scientists agree that human activity has significantly increased greenhouse gases in the atmosphere—most dramatically since the 1970s. Yet global warming skeptics and ill-informed elected officials continue to dismiss this broad scientific consensus. In this updated edition of his authoritative book, MIT atmospheric scientist Kerry Emanuel outlines the basic science of global warming and how the current consensus has emerged. Although it is impossible to predict exactly when the most dramatic effects of global warming will be felt, he argues, we can be confident that we face real dangers. Emanuel warns that global warming will contribute to an increase in the intensity and power of hurricanes and flooding and more rapidly advancing deserts. But just as our actions have created the looming crisis, so too might they avert it. Emanuel calls for urgent action to reduce greenhouse gases and criticizes the media for downplaying the dangers of global warming (and, in search of “balance,” quoting extremists who deny its existence). This edition has been updated to include the latest climate data, a discussion of the earth's carbon cycle, the warming hiatus of the first decade of this century, the 2017 hurricanes, advanced energy options, the withdrawal from the Paris climate agreement, and more. It offers a new foreword by former U.S. Representative Bob Inglis (R-SC), who now works on climate action through his organization

RepublicEN.

What We Know about Climate Change-Kerry A. Emanuel 2007 An introduction to the scientific consensus on the human role in global warming.

What We Know about Climate Change-Kerry A. Emanuel 2007 An introduction to the scientific consensus on the human role in global warming.

How We Know, what We Know, about Our Changing Climate-Lynne Cherry 2010-03-01 "This volume describes where scientists look to find evidence of climate change--from changes in bird migration patterns and fruit blossom dates, to obtaining tree rings and mud cores--and especially how students and other citizen-scientists are assisting to monitor climate change, as well as what can be done to mitigate global warming"--Provided by publisher.

Climate Change-Joseph J. Romm 2016 "This book offers the most up-to-date examination of climate change's foundational science, implications for our future, and clean energy solutions that can mitigate its effects"--Back cover.

Climate Change-The Royal Society 2014-02-26 Climate Change: Evidence and Causes is a jointly produced publication of The US National Academy of Sciences and The Royal Society. Written by a UK-US team of leading climate

scientists and reviewed by climate scientists and others, the publication is intended as a brief, readable reference document for decision makers, policy makers, educators, and other individuals seeking authoritative information on some of the questions that continue to be asked. *Climate Change* makes clear what is well-established and where understanding is still developing. It echoes and builds upon the long history of climate-related work from both national academies, as well as on the newest climate-change assessment from the United Nations' Intergovernmental Panel on Climate Change. It touches on current areas of active debate and ongoing research, such as the link between ocean heat content and the rate of warming.

Climate Change Science-National Research Council 2001-06-28 The warming of the Earth has been the subject of intense debate and concern for many scientists, policy-makers, and citizens for at least the past decade. *Climate Change Science: An Analysis of Some Key Questions*, a new report by a committee of the National Research Council, characterizes the global warming trend over the last 100 years, and examines what may be in store for the 21st century and the extent to which warming may be attributable to human activity.

The Discovery of Global Warming-Spencer R. Weart 2003 The author of *Scientists in Power and Nuclear Fear* illuminates the scientific process that reached consensus in 2001 about global warming by assembling evidence from around the world to show the complex workings of the earth's climate and environment. (*Ecology & Environment*)

What We Know about Climate Change-Kerry A. Emanuel 2012 Offers an introduction to the scientific consensus on the human role in global warming.

Preparing for Climate Change-Michael D. Mastrandrea 2010-09-10 Why we should prepare for climate change now by taking anticipatory action in vulnerable regions. Global momentum is building to reduce greenhouse gas emissions. So far, so good. The less happy news is that Earth's temperatures will continue to rise for decades.

And evidence shows that climbing temperatures are already having serious consequences for vulnerable people and regions through droughts, extreme weather, and melting glaciers. In this book, climate experts Michael Mastrandrea and Stephen Schneider argue that we need to start adapting to climate change, now. They write that these efforts should focus primarily on identifying the places and people most at risk and taking anticipatory action—from developing drought-resistant crops to building sea walls. The authors roundly reject the idea that reactive, unplanned adaptation will solve our problems—that species will migrate northward as climates warm, and farmers will shift to new crops and more hospitable locations. And they are highly critical of “geoengineering” schemes that are designed to cool the planet by such methods as injecting iron into oceans or exploding volcanoes. Mastrandrea and Schneider insist that smart adaptation will require a series of local and regional projects, many of them in the countries least able to pay for them and least responsible for the problem itself. Ensuring that we address the needs of these countries, while we work globally to reduce emissions over the long term, is our best chance to avert global disaster and to reduce the terrible, unfair burdens that are likely to accompany global warming.

Climate Change-Joseph F.C. DiMento 2014-03-21 An updated and accessible account of what science knows about climate change, incorporating the latest scientific findings and policy initiatives.

Divine Wind-Kerry Emanuel 2005-09-01 Imagine standing at the center of a Roman coliseum that is 20 miles across, with walls that soar 10 miles into the sky, towering walls with cascades of ice crystals falling along its brilliantly white surface. That's what it's like to stand in the eye of a hurricane. In *Divine Wind*, Kerry Emanuel, one of the world's leading authorities on hurricanes, gives us an engaging account of these awe-inspiring meteorological events, revealing how hurricanes and typhoons have literally altered human history, thwarting military incursions and changing the course of explorations. Offering an account of the physics of the tropical atmosphere, the author explains how such benign climates give rise to the most powerful storms in the world and tells what

modern science has learned about them. Interwoven with this scientific account are descriptions of some of the most important hurricanes in history and relevant works of art and literature. For instance, he describes the 17th-century hurricane that likely inspired Shakespeare's *The Tempest* and that led to the British colonization of Bermuda. We also read about the Galveston Hurricane of 1900, by far the worst natural calamity in U.S. history, with a death toll between 8,000 and 12,000 that exceeded the San Francisco earthquake, the Johnstown Flood, and the Okeechobee Hurricane. Boasting more than one hundred color illustrations, from modern Doppler imagery to classic paintings by Winslow Homer, *Divine Wind* captures the profound effects that hurricanes have had on humanity. Its fascinating blend of history, science, and art will appeal to weather junkies, science buffs, and everyone who read Isaac's *Storm*.

Losing Earth-Nathaniel Rich 2020-03-05 By 1979, we knew all that we know now about the science of climate change - what was happening, why it was happening, and how to stop it. Over the next ten years, we had the very real opportunity to stop it. Obviously, we failed. Nathaniel Rich's groundbreaking account of that failure - and how tantalizingly close we came to signing binding treaties that would have saved us all before the fossil fuels industry and politicians committed to anti-scientific denialism - is already a journalistic blockbuster, a full issue of the *New York Times Magazine* that has earned favorable comparisons to Rachel Carson's *Silent Spring* and John Hersey's *Hiroshima*. Rich has become an instant, in-demand expert and speaker. A major movie deal is already in place. It is the story, perhaps, that can shift the conversation. In the book *Losing Earth*, Rich is able to provide more of the context for what did - and didn't - happen in the 1980s and, more important, is able to carry the story fully into the present day and wrestle with what those past failures mean for us in 2019. It is not just an agonizing revelation of historical missed opportunities, but a clear-eyed and eloquent assessment of how we got to now, and what we can and must do before it's truly too late.

Global Weirdness-Climate Central 2013 An

accessible explanation of climate change summarizes its science while sharing insights into its implications for the future, answering key questions from the role of fossil fuels to the economic costs of reducing carbon emissions.

The Uninhabitable Earth-David Wallace-Wells 2020-03-17 #1 NEW YORK TIMES BESTSELLER * "The Uninhabitable Earth hits you like a comet, with an overflow of insanely lyrical prose about our pending Armageddon."--Andrew Solomon, author of *The Noonday Demon* With a new afterword It is worse, much worse, than you think. If your anxiety about global warming is dominated by fears of sea-level rise, you are barely scratching the surface of what terrors are possible--food shortages, refugee emergencies, climate wars and economic devastation. An "epoch-defining book" (*The Guardian*) and "this generation's *Silent Spring*" (*The Washington Post*), *The Uninhabitable Earth* is both a travelogue of the near future and a meditation on how that future will look to those living through it--the ways that warming promises to transform global politics, the meaning of technology and nature in the modern world, the sustainability of capitalism and the trajectory of human progress. *The Uninhabitable Earth* is also an impassioned call to action. For just as the world was brought to the brink of catastrophe within the span of a lifetime, the responsibility to avoid it now belongs to a single generation--today's. Praise for *The Uninhabitable Earth* "The Uninhabitable Earth is the most terrifying book I have ever read. Its subject is climate change, and its method is scientific, but its mode is Old Testament. The book is a meticulously documented, white-knuckled tour through the cascading catastrophes that will soon engulf our warming planet."--Farhad Manjoo, *The New York Times* "Riveting. . . . Some readers will find Mr. Wallace-Wells's outline of possible futures alarmist. He is indeed alarmed. You should be, too."--*The Economist* "Potent and evocative. . . . Wallace-Wells has resolved to offer something other than the standard narrative of climate change. . . . He avoids the 'eerily banal language of climatology' in favor of lush, rolling prose."--Jennifer Szalai, *The New York Times* "The book has potential to be this generation's *Silent Spring*."--*The Washington Post* "The Uninhabitable Earth, which has become a best seller, taps into the underlying emotion of the day: fear. . . . I encourage people to read this book."--Alan Weisman, *The New York Review of*

Books

Climate Change-Edmond A. Mathez 2009-05-08
Climate Change is geared toward a variety of students and general readers who seek the real science behind global warming. Exquisitely illustrated, the text introduces the basic science underlying both the natural progress of climate change and the effect of human activity on the deteriorating health of our planet. Noted expert and author Edmond A. Mathez synthesizes the work of leading scholars in climatology and related fields, and he concludes with an extensive chapter on energy production, anchoring this volume in economic and technological realities and suggesting ways to reduce greenhouse-gas emissions. Climate Change opens with the climate system fundamentals: the workings of the atmosphere and ocean, their chemical interactions via the carbon cycle, and the scientific framework for understanding climate change. Mathez then brings the climate of the past to bear on our present predicament, highlighting the importance of paleoclimatology in understanding the current climate system. Subsequent chapters explore the changes already occurring around us and their implications for the future. In a special feature, Jason E. Smerdon, associate research scientist at Lamont-Doherty Earth Observatory of Columbia University, provides an innovative appendix for students.

Discerning Experts-Michael Oppenheimer 2019-02-22
The need for expert judgment -- Assessing acid rain in the United States: the National Acid Precipitation Assessment Program -- Assessing ozone depletion -- Assessing the ice: sea level rise predictions for the West Antarctic Ice Sheet, 1981-2007 -- Patrolling the science/policy border -- What assessments do -- Conclusion

A Vast Machine-Paul N. Edwards 2010-03-12
The science behind global warming, and its history: how scientists learned to understand the atmosphere, to measure it, to trace its past, and to model its future. Global warming skeptics often fall back on the argument that the scientific case for global warming is all model predictions, nothing but simulation; they warn us that we need to wait for real data, "sound science." In A Vast Machine Paul Edwards has news for these

skeptics: without models, there are no data. Today, no collection of signals or observations—even from satellites, which can "see" the whole planet with a single instrument—becomes global in time and space without passing through a series of data models. Everything we know about the world's climate we know through models. Edwards offers an engaging and innovative history of how scientists learned to understand the atmosphere—to measure it, trace its past, and model its future.

Dangerous Earth-Ellen Prager 2020-03-02
The Earth is a beautiful and wondrous planet, but also frustratingly complex and, at times, violent: much of what has made it livable can also cause catastrophe. Volcanic eruptions create land and produce fertile, nutrient-rich soil, but they can also bury forests, fields, and entire towns under ash, mud, lava, and debris. The very forces that create and recycle Earth's crust also spawn destructive earthquakes and tsunamis. Water and wind bring and spread life, but in hurricanes they can leave devastation in their wake. And while it is the planet's warmth that enables life to thrive, rapidly increasing temperatures are causing sea levels to rise and weather events to become more extreme. Today, we know more than ever before about the powerful forces that can cause catastrophe, but significant questions remain. Why can't we better predict some natural disasters? What do scientists know about them already? What do they wish they knew? In Dangerous Earth, marine scientist and science communicator Ellen Prager explores the science of investigating volcanoes, earthquakes, tsunamis, hurricanes, landslides, rip currents, and—maybe the most perilous hazard of all—climate change. Each chapter considers a specific hazard, begins with a game-changing historical event (like the 1980 eruption of Mt. St. Helens or the landfall and impacts of Hurricane Harvey), and highlights what remains unknown about these dynamic phenomena. Along the way, we hear from scientists trying to read Earth's warning signs, pass its messages along to the rest of us, and prevent catastrophic loss. A sweeping tour of some of the most awesome forces on our planet—many tragic, yet nonetheless awe-inspiring—Dangerous Earth is an illuminating journey through the undiscovered, unresolved, and in some cases unimagined mysteries that continue to frustrate and fascinate the world's leading scientists: the "wish-we-knews" that ignite both our curiosity

and global change.

The Real Global Warming Disaster-

Christopher Booker 2013-01-31 This original book considers one of the most extraordinary scientific and political stories of our time: how in the 1980s a handful of scientists came to believe that mankind faced catastrophe from runaway global warming, and how today this has persuaded politicians to land us with what promises to be the biggest bill in history. Christopher Booker interweaves the science of global warming with that of its growing political consequences, showing how just when the politicians are threatening to change our Western way of life beyond recognition, the scientific evidence behind the global warming theory is being challenged like never before. The book exposes the myth that the global warming theory is supported by a 'consensus of the world's top climate scientists'. It shows how the UN's Intergovernmental Panel on Climate Change is run by a small group of 'global warming' zealots, who have repeatedly rigged evidence to support their theory. But the politicians, pushed by the media, have so fallen for its propaganda that, short of dramatic change, our Western world now faces an unprecedented disaster.

The Oxford Handbook of Climate Change and Society-

John S. Dryzek 2011-08-18 Climate change presents perhaps the most profound challenge ever confronted by human society. This volume is a definitive analysis drawing on the best thinking on questions of how climate change affects human systems, and how societies can, do, and should respond. Key topics covered include the history of the issues, social and political reception of climate science, the denial of that science by individuals and organized interests, the nature of the social disruptions caused by climate change, the economics of those disruptions and possible responses to them, questions of human security and social justice, obligations to future generations, policy instruments for reducing greenhouse gas emissions, and governance at local, regional, national, international, and global levels.

Climate Change: Evidence, Impacts, and Choices-Division on Earth and Life Studies 2012-11-12 What is climate? Climate is

commonly thought of as the expected weather conditions at a given location over time. People know when they go to New York City in winter, they should take a heavy coat. When they visit the Pacific Northwest, they should take an umbrella. Climate can be measured as many geographic scales - for example, cities, countries, or the entire globe - by such statistics as average temperatures, average number of rainy days, and the frequency of droughts. Climate change refers to changes in these statistics over years, decades, or even centuries. Enormous progress has been made in increasing our understanding of climate change and its causes, and a clearer picture of current and future impacts is emerging. Research is also shedding light on actions that might be taken to limit the magnitude of climate change and adapt to its impacts. *Climate Change: Evidence, Impacts, and Choices* is intended to help people understand what is known about climate change. First, it lays out the evidence that human activities, especially the burning of fossil fuels, are responsible for much of the warming and related changes being observed around the world. Second, it summarizes projections of future climate changes and impacts expected in this century and beyond. Finally, the booklet examines how science can help inform choice about managing and reducing the risks posed by climate change. The information is based on a number of National Research Council reports, each of which represents the consensus of experts who have reviewed hundreds of studies describing many years of accumulating evidence.

A Case for Climate Engineering-David Keith 2013-09-20 The author argues that it is time for man to at least consider climate engineering—including putting reflective particles in the atmosphere to combat global warming—but it must be considered cautiously and not be implemented until all side effects are known.

Communicating Climate Change-Anne K. Armstrong 2018-11-15 Environmental educators face a formidable challenge when they approach climate change due to the complexity of the science and of the political and cultural contexts in which people live. There is a clear consensus among climate scientists that climate change is already occurring as a result of human activities, but high levels of climate change awareness and

growing levels of concern have not translated into meaningful action. Communicating Climate Change provides environmental educators with an understanding of how their audiences engage with climate change information as well as with concrete, empirically tested communication tools they can use to enhance their climate change program. Starting with the basics of climate science and climate change public opinion, Armstrong, Krasny, and Schuldt synthesize research from environmental psychology and climate change communication, weaving in examples of environmental education applications throughout this practical book. Each chapter covers a separate topic, from how environmental psychology explains the complex ways in which people interact with climate change information to communication strategies with a focus on framing, metaphors, and messengers. This broad set of topics will aid educators in formulating program language for their classrooms at all levels. Communicating Climate Change uses fictional vignettes of climate change education programs and true stories from climate change educators working in the field to illustrate the possibilities of applying research to practice. Armstrong et al, ably demonstrate that environmental education is an important player in fostering positive climate change dialogue and subsequent climate change action. An open access version of this book is available through Cornell Open.

The Climate Solutions Consensus-National Council for Science and the Environment 2012-06-22 In 2007, the Intergovernmental Panel on Climate Change shared the 2007 Nobel Peace Prize (with former Vice President Al Gore) for its reporting on the human causes of climate change. In 2008, the National Council for Science and the Environment reported that the acceleration of climate change is already faster than the IPCC projected only a year earlier. How we deal with the rapid environmental changes, and the human forces that are driving these changes, will be among the defining issues of our generation. Climate Solutions Consensus presents an agenda for America. It is the first major consensus statement by the nation's leading scientists, and it provides specific recommendations for federal policies, for state and local governments, for businesses, and for colleges and universities that are preparing future generations who will be dealing with a radically changed climate. The book draws upon

the recommendations developed by more than 1200 scientists, educators and decision makers who participated in the National Council for Science and the Environment's 8th National Conference on Science, Policy and the Environment. After presenting a lucid narrative of the science behind climate change and its solutions, Climate Solutions Consensus presents 35 practical, results-oriented approaches for minimizing climate change and its impacts. It clearly spells out options for technological, societal, and policy actions. And it deals head-on with controversial topics, including nuclear energy, ocean fertilization and atmospheric geo-engineering. One of the book's key conclusions is that climate solutions are about much more than energy sources. They involve re-examining everything people do with an eye toward minimizing climate impacts. This includes our eating habits, consumption patterns, transportation, building and housing, forestry, land use, education, and more. According to these scientists, the time to act is now. With clarity and urgency, they tell us exactly what needs to be done to start reversing the driving factors behind climate change, minimizing their consequences, and adapting to what is beyond our power to stop.

Don't Even Think About It-George Marshall 2015-08-18 The director of the Climate Outreach and Information Network explores the psychological mechanism that enables people to ignore the dangers of climate change, using sidebars, cartoons and engaging stories from his years of research to reveal how humans are wired to primarily respond to visible threats.

Global Warming-David Archer 2011-09-21 Archer's Global Warming: Understanding the Forecast 2nd Edition, is the first real text to present the science and policy surrounding climate change at the right level. Accompanying videos, simulations and instructional support makes it easier to build a syllabus to improve and create new material on climate change. Archer's polished writing style makes the text entertaining while the improved pedagogy helps better understand key concepts, ideas and terms. This edition has been revised and reformulated with a new chapter template of short chapter introductions, study questions at the end, and critical thinking puzzlers throughout. Also a new asset for the BCS was created that will give ideas

for assignments and topics for essays and other projects. Furthermore, a number of interactive models have been built to help understand the science and systems behind the processes.

Climate Change Science-John C. Mutter 2020-05-19 How will future climates be different from today's world—and what consequences will changes in climate have for societies and their development strategies? This book is a primer on the essential science for grasping the workings of climate change and climate prediction. It is accessible for readers with little to no background in science, with an emphasis on the needs of those studying sustainable development. John C. Mutter gives a just-the-facts overview of how the climate system functions and what we know about why changes occur. He recounts the evolution of climatology from the earliest discoveries about Earth's climate to present-day predictive capabilities, and clearly presents the scientific basis of fundamental topics such as climate zones, ocean-atmosphere dynamics, and the long-term cycles from glacial to interglacial periods. Mutter also details the mechanisms of climate change and the ways in which human activity affects global climate. He explains the science behind some known consequences of rising temperatures, such as sea level rise, hurricane behavior, and climate variability. The primer discusses how climate predictions are made and examines the sources of uncertainty in forecasting. *Climate Change Science* is a straightforward and easy-to-read treatment of the fundamental science needed to comprehend one of today's most important issues.

Abrupt Impacts of Climate Change-National Research Council 2013-12-31 Climate is changing, forced out of the range of the past million years by levels of carbon dioxide and other greenhouse gases not seen in the Earth's atmosphere for a very, very long time. Lacking action by the world's nations, it is clear that the planet will be warmer, sea level will rise, and patterns of rainfall will change. But the future is also partly uncertain -- there is considerable uncertainty about how we will arrive at that different climate. Will the changes be gradual, allowing natural systems and societal infrastructure to adjust in a timely fashion? Or will some of the changes be more abrupt, crossing some threshold or "tipping point" to change so fast that the time between when a

problem is recognized and when action is required shrinks to the point where orderly adaptation is not possible? *Abrupt Impacts of Climate Change* is an updated look at the issue of abrupt climate change and its potential impacts. This study differs from previous treatments of abrupt changes by focusing on abrupt climate changes and also abrupt climate impacts that have the potential to severely affect the physical climate system, natural systems, or human systems, often affecting multiple interconnected areas of concern. The primary timescale of concern is years to decades. A key characteristic of these changes is that they can come faster than expected, planned, or budgeted for, forcing more reactive, rather than proactive, modes of behavior. *Abrupt Impacts of Climate Change* summarizes the state of our knowledge about potential abrupt changes and abrupt climate impacts and categorizes changes that are already occurring, have a high probability of occurrence, or are unlikely to occur. Because of the substantial risks to society and nature posed by abrupt changes, this report recommends the development of an Abrupt Change Early Warning System that would allow for the prediction and possible mitigation of such changes before their societal impacts are severe. Identifying key vulnerabilities can help guide efforts to increase resiliency and avoid large damages from abrupt change in the climate system, or in abrupt impacts of gradual changes in the climate system, and facilitate more informed decisions on the proper balance between mitigation and adaptation. Although there is still much to learn about abrupt climate change and abrupt climate impacts, to willfully ignore the threat of abrupt change could lead to more costs, loss of life, suffering, and environmental degradation. *Abrupt Impacts of Climate Change* makes the case that the time is here to be serious about the threat of tipping points so as to better anticipate and prepare ourselves for the inevitable surprises.

The Story of More-Hope Jahren 2020-03-03 "Hope Jahren is the voice that science has been waiting for." —Nature "A superb account of the deadly struggle between humanity and what may prove the only life-bearing planet within ten light years, written in a brilliantly sardonic and conversational style." —E. O. Wilson "Hope Jahren asks the central question of our time: how can we learn to live on a finite planet? *The Story of More* is thoughtful, informative, and—above

all—essential.” —Elizabeth Kolbert, author of *The Sixth Extinction* Hope Jahren is an award-winning scientist, a brilliant writer, a passionate teacher, and one of the seven billion people with whom we share this earth. In *The Story of More*, she illuminates the link between human habits and our imperiled planet. In concise, highly readable chapters, she takes us through the science behind the key inventions—from electric power to large-scale farming to automobiles—that, even as they help us, release greenhouse gases into the atmosphere like never before. She explains the current and projected consequences of global warming—from superstorms to rising sea levels—and the actions that we all can take to fight back. At once an explainer on the mechanisms of global change and a lively, personal narrative given to us in Jahren’s inimitable voice, *The Story of More* is the essential pocket primer on climate change that will leave an indelible impact on everyone who reads it.

Climate Shock-Gernot Wagner 2016-04-19 How knowing the extreme risks of climate change can help us prepare for an uncertain future If you had a 10 percent chance of having a fatal car accident, you'd take necessary precautions. If your finances had a 10 percent chance of suffering a severe loss, you'd reevaluate your assets. So if we know the world is warming and there's a 10 percent chance this might eventually lead to a catastrophe beyond anything we could imagine, why aren't we doing more about climate change right now? We insure our lives against an uncertain future—why not our planet? In *Climate Shock*, Gernot Wagner and Martin Weitzman explore in lively, clear terms the likely repercussions of a hotter planet, drawing on and expanding from work previously unavailable to general audiences. They show that the longer we wait to act, the more likely an extreme event will happen. A city might go underwater. A rogue nation might shoot particles into the Earth's atmosphere, geoengineering cooler temperatures. Zeroing in on the unknown extreme risks that may yet dwarf all else, the authors look at how economic forces that make sensible climate policies difficult to enact, make radical would-be fixes like geoengineering all the more probable. What we know about climate change is alarming enough. What we don't know about the extreme risks could be far more dangerous. Wagner and Weitzman help readers understand that we need to think about climate

change in the same way that we think about insurance—as a risk management problem, only here on a global scale. With a new preface addressing recent developments Wagner and Weitzman demonstrate that climate change can and should be dealt with—and what could happen if we don't do so—tackling the defining environmental and public policy issue of our time.

12 Things to Know about Climate Change-

Rebecca Felix 2015-01-01 Explores 12 things to know about climate change. Includes amazing facts along with information about key players and innovations.

Climate of Extremes-Patrick J. Michaels 2009-01-01 An in-depth look at consistent, solid science on the other side of the gloom-and-doom global warming story that is rarely reported and pushed aside: that global warming is likely to be modest, and there is no apocalypse on the horizon.

False Alarm-Bjorn Lomborg 2020-07-14 The New York Times-bestselling "skeptical environmentalist" argues that panic over climate change is causing more harm than good Hurricanes batter our coasts. Wildfires rage across the American West. Glaciers collapse in the Arctic. Politicians, activists, and the media espouse a common message: climate change is destroying the planet, and we must take drastic action immediately to stop it. Children panic about their future, and adults wonder if it is even ethical to bring new life into the world. Enough, argues bestselling author Bjorn Lomborg. Climate change is real, but it's not the apocalyptic threat that we've been told it is. Projections of Earth's imminent demise are based on bad science and even worse economics. In panic, world leaders have committed to wildly expensive but largely ineffective policies that hamper growth and crowd out more pressing investments in human capital, from immunization to education. *False Alarm* will convince you that everything you think about climate change is wrong -- and points the way toward making the world a vastly better, if slightly warmer, place for us all.

Apocalypse Never-Michael Shellenberger

2020-06-30 Now a National Bestseller! Climate change is real but it's not the end of the world. It is not even our most serious environmental problem. Michael Shellenberger has been fighting for a greener planet for decades. He helped save the world's last unprotected redwoods. He co-created the predecessor to today's Green New Deal. And he led a successful effort by climate scientists and activists to keep nuclear plants operating, preventing a spike of emissions. But in 2019, as some claimed "billions of people are going to die," contributing to rising anxiety, including among adolescents, Shellenberger decided that, as a lifelong environmental activist, leading energy expert, and father of a teenage daughter, he needed to speak out to separate science from fiction. Despite decades of news media attention, many remain ignorant of basic facts. Carbon emissions peaked and have been declining in most developed nations for over a decade. Deaths from extreme weather, even in poor nations, declined 80 percent over the last four decades. And the risk of Earth warming to very high temperatures is increasingly unlikely thanks to slowing population growth and abundant natural gas. Curiously, the people who are the most alarmist about the problems also tend to oppose the obvious solutions. What's really behind the rise of apocalyptic environmentalism? There are powerful financial interests. There are desires for status and power. But most of all there is a desire among supposedly secular people for transcendence. This spiritual impulse can be natural and healthy. But in preaching fear without love, and guilt without redemption, the new religion is failing to satisfy our deepest psychological and existential needs.

Climate Modelling-Elisabeth A. Lloyd
2018-02-13 This edited collection of works by leading climate scientists and philosophers introduces readers to issues in the foundations, evaluation, confirmation, and application of climate models. It engages with important topics directly affecting public policy, including the role of doubt, the use of satellite data, and the robustness of models. Climate Modelling provides an early and significant contribution to the burgeoning Philosophy of Climate Science field that will help to shape our understanding of these topics in both philosophy and the wider scientific context. It offers insight into the reasons we should believe what climate models say about the world but addresses the issues that

inform how reliable and well-confirmed these models are. This book will be of interest to students of climate science, philosophy of science, and of particular relevance to policy makers who depend on the models that forecast future states of the climate and ocean in order to make public policy decisions.

The Citizen's Guide to Climate Success-Mark Jaccard 2020-02-06 Sometimes solving climate change seems impossibly complex, and it is hard to know what changes we all can and should make to help. This book offers hope. Drawing on the latest research, Mark Jaccard shows us how to recognize the absolutely essential actions (decarbonizing electricity and transport) and policies (regulations that phase out coal plants and gasoline vehicles, carbon tariffs). Rather than feeling paralyzed and pursuing ineffective efforts, we can all make a few key changes in our lifestyles to reduce emissions, to contribute to the urgently needed affordable energy transition in developed and developing countries. More importantly, Jaccard shows how to distinguish climate-sincere from insincere politicians and increase the chance of electing and sustaining these leaders in power. In combining the personal and the political, The Citizen's Guide to Climate Success offers a clear and simple strategic path to solving the greatest problem of our times. A PDF version of this title is also available as Open Access on Cambridge Core at doi.org/10.1017/9781108783453.

How to Prepare for Climate Change-David Pogue 2021-01-26 A practical and comprehensive guide to surviving the greatest disaster of our time, from New York Times bestselling self-help author and beloved CBS Sunday Morning science and technology correspondent David Pogue. You might not realize it, but we're already living through the beginnings of climate chaos. In Arizona, laborers now start their day at 3 a.m. because it's too hot to work past noon. Chinese investors are snapping up real estate in Canada. Millennials have evacuation plans. Moguls are building bunkers. Retirees in Miami are moving inland. In How to Prepare for Climate Change, bestselling self-help author David Pogue offers sensible, deeply researched advice for how the rest of us should start to ready ourselves for the years ahead. Pogue walks readers through what to grow, what to eat, how to build, how to insure, where to invest, how to prepare your children

and pets, and even where to consider relocating when the time comes. (Two areas of the country, in particular, have the requisite cool temperatures, good hospitals, reliable access to water, and resilient infrastructure to serve as climate havens in the years ahead.) He also provides wise tips for managing your anxiety, as well as action plans for riding out every climate catastrophe, from superstorms and wildfires to ticks and epidemics. Timely and enlightening, *How to Prepare for Climate Change* is an indispensable guide for anyone who read *The Uninhabitable Earth* or *The Sixth Extinction* and wants to know how to make smart choices for the upheaval ahead.

Climate Change- 2011 "This publication provides the latest scientific knowledge on a series of climate change topics relevant to Australia and the world. It draws on peer-reviewed literature contributed to by thousands of researchers ... Climate change is the greatest ecological, economic, and social challenge of our time. Climate change research over many years shows links between human activities and warming of the atmosphere and oceans. This warming has caused changes to the climate

system, such as changes in rain and wind patterns, and reductions in Arctic sea ice. Climate change adaptation involves taking action to adapt to climate change and to plan and prepare for the risk of future change. Climate change mitigation refers to actions that aim to limit greenhouse gases in the atmosphere, either by reducing emissions or by increasing the amount of carbon dioxide stored in natural sinks."--Publisher description.

What Every Child Should Know About Climate Change | Children's Earth Sciences Books-Baby Professor 2017-03-15 Climate change affects everyone, regardless of age, status, gender and nationality. It is a worldwide problem so kids need to know exactly what it is and what can be done to minimize its effects. This book of climate change knowledge is rich with kid-friendly information and vibrant pictures to tickle the imagination. Raise aware and knowledgeable children. Grab this book today!