

WORTH
A READ



scientists warns, for example, that a rise of just 1.5° will expose at least 400 million people to water stress and five million to hunger, result in a loss of 18% of the world's species and trigger the "onset of complete melting of Greenland's ice". Studies suggest that beyond 2° we expose more than 2 billion people to risks of water shortage, prompt a reduction of 30% in global rice yields, the bleaching of 97% of the world's reefs and further increase the rate of species extinction. But more significantly – as if this was not enough – we run the risk of setting in place a series of uncontrollable "positive feedbacks".

One example of such a feedback is sufficient to demonstrate the reason for concern. As the world warms, so the likelihood rises that perma-

politically – rather than scientifically – acceptable.

It is hard to deny that Monbiot's book is a depressing read. Yet, paradoxically, it is also a refreshing cause for at least some optimism. Monbiot has written this book with one purpose in mind: to persuade us all that climate change is worth fighting for, and that it is not too late to do so. On the basis of what appears to be very thorough research, he makes a compelling case that it is technically and economically feasible for the UK (and by extension most other developed countries) to reduce carbon emissions by 90% by 2030, without destroying current standards of living.

The focus of most of his book is on finding practical solutions. He identifies viable measures for us to transform our homes and our energy and transport systems, and he outlines opportunities for reducing emissions by 90% in two key industrial sectors – retailing and cement manufacture – both of which produce a disproportionate amount of carbon dioxide. In identifying these measures, he articulates a vision that takes us beyond the bleating of many environmentalists who are quick to point out the problem, but less than convincing in identifying solutions.

In this book, don't expect some of the usual suggestions. Monbiot is not afraid to question much of the received wisdom on the subject, nor does he refrain from tackling some of his colleagues in the environmental movement. There is much, for instance, that he dislikes about renewable energy: the misleading claims that many of its advocates make, the tokenism that often attends it, and the manner in which environmentalists often overlook some of its destructive impacts. In his opening chapter he critiques renowned environmental architect, Bill Dunster – who designed a zero-carbon development in South London – for his claim that up to half a small home's annual electric needs can be met by a micro-wind turbine. Based on an engineering analysis of these turbines, Monbiot suggests that to provide the required energy would need a turbine four metres in diameter, which if attached to a house "would exert sufficient lateral thrust to rip the building to bits". Similarly he takes most environmentalists to task for over-playing the benefits of energy efficiency, and suggests that in the absence of proper government policies this is not just a waste of time, but often counter-productive.

The book is a call for action – a call for all of us not simply to lament our government's failures to act, but to take steps to force them to act. This is a bold expectation, and Monbiot recognises this,

HEAT: how to stop the planet burning – George Monbiot

WORDS JONATHON HANKS

In 1991 *Time* magazine ran a cover story on climate change, highlighting the need for urgent political action on this global issue. Over the intervening fifteen years very little meaningful progress has taken place at an international level. While some may applaud the Kyoto Protocol coming into force in 2005, for many observers its commitments are little more than political puffery. Not only is the Protocol weakened by the absence of the USA and Australia and the complete absence of obligations on developing country emitters such as China, India and South Africa, but the very nature of its target – an average reduction in emissions of 5% below 1990 levels by 2012 – is seen to be grossly inadequate.

In his latest thoroughly researched book, *Heat: How to Stop the Planet Burning*, Guardian columnist and bestselling author George Monbiot provides a compelling case that rich countries need to reduce their current per capita carbon emissions by 90% by 2030. This, he argues, is necessary if we are to prevent global average temperatures rising by more than two degrees above pre-industrial levels, seen by many scientists as a critical threshold or "tipping point" after which warming will increase at a significantly more rapid rate.

This is not to suggest that a rise of up to 2° will be without consequence; a recent meeting of global

frost in the north will melt. In the Western Siberian bog alone, which has already begun melting, there is believed to be 70 billion tonnes of methane gas, the release of which would equate to 73 years of manmade carbon dioxide emissions. The message is bleak: if we fail to prevent a rise above 2° then we may set in motion a series of runaway events that could, suggest some scientists, result in a rise of 6° by 2100. Monbiot contends that the closest historical precedent for such an event was the end of the Permian period around 251 million years ago, when about 90% of the Earth's species appear to have been wiped out.

Of course there are still many who seek to deny the science of climate change. In a fascinating and brutal critique of the so-called "climate sceptics", Monbiot questions whether they really fit the definition of a sceptic: "a seeker after truth; an inquirer who has not yet arrived at definite conclusions". On the basis of a thoroughly persuasive critique – in which Exxon, Philip Morris and many in the media come under particular scrutiny – it would seem that most of these are not "sceptics" in the true sense, but rather the perpetrators, or willing victims, of a sophisticated public relations industry. More worrying still, is the evidence he presents of the political pressure exerted on some leading scientists to downplay the nature and extent of the challenge facing us, and to present figures that are

HEAT



GEORGE MONBIOT

► **The book, Heat: How to stop the planet burning**
George Monbiot



JONATHON HANKS
IS AN ASSOCIATE
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deliberately choosing to write his book in a spirit of optimism. While he may be convincing in suggesting that the options for reducing emissions – though difficult – are technically and economically feasible (except with aviation for which he can see no viable alternative other than to rethink our travel patterns), he concedes that this can happen only with a massive programme of action that no government has yet been prepared to take.

Herein lies the rub. If climate change is going to be meaningfully addressed, then it is up to us, as citizens and as consumers, to make it happen. As Monbiot observes, despite this being “the greatest danger the world now faces”, there are “astonishingly few” active campaigners on this issue, and fewer still who have moved beyond hypocrisy.

One of the reasons for this lack of action, is that many of us with the greatest ability to effect change are simply too comfortable within the current system, and have too much to lose. While some of us may make token gestures – swapping a 4x4 for a fuel-efficient hybrid, selling our dishwashers and tumble-dryers, and installing energy efficient light bulbs – nearly all those I know who are active in the environmental movement share with me the common badge of our hypocrisy: the frequent-flyer Gold Card. While, as Monbiot argues, self-enforced abstinence on its own may be a waste of time, the failure of most of us to act on even the smaller things is symptomatic of the challenge that we are facing.

The scale of the challenge is staggering and the time available in which to act is frighteningly short. Yet there may be still be reason for hope. As was demonstrated in the response of governments and citizens during the Second World War, when faced with a compelling threat we have enormous capacity for cooperation, self-sacrifice and innovation. Although the response to climate change will involve more than turning saucepans into spitfires, we have a precedent to demonstrate that in a time of crisis the government and the public can be mobilised to act collectively.

At the beginning of his book, Monbiot suggests that if he fails to motivate us to act, then he hopes at least that he might make people so depressed “that they stay in bed all day, thereby reducing their consumption of fossil fuels”. My fear is that until the threat becomes more visible, until we recognise the merits in collectively supporting a campaign for more austerity, most of us will neither reduce our emissions nor actively take steps to change.

If Monbiot’s prognosis on the dangers of climate change is true, then I hope I am wrong in my assessment of human nature. ■

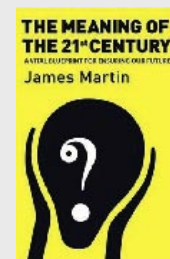
WATCH OUT FOR

MindShift’s take on some thought provoking recent publications

▶ **The Company: A Short History of a Revolutionary Idea** John Micklethwait and Adrian Wooldridge

It is fashionable to see the multinational corporation (along with the World Bank and the IMF) as the source of many of today’s social ills. One of the most powerful institutions in society, the limited-liability company, has become a favoured target of anti-globalisation activists. In their surprisingly entertaining book, authors Micklethwait and Wooldridge – both from the Economist – trace the history of the establishment of the modern corporation, making the case that the creation of the company, “a simple but brilliant idea... and Britain’s most influential invention... is the basis of the prosperity of the West and the best hope for the future of the world”.

In little more than 200 pages, the book provides a comprehensive review of the evolution of the company, from the time of “merchants and monopolists” (3000B.C. – A.D. 1500), through the period of “imperialists and speculators” (1500 – 1750), to the “prolonged and painful birth” of the limited liability company (1750 – 1862). The book then focuses on the recent rise of big business in America, Britain, Germany and Japan (1862-1950), examining what they call “the triumph of managerial capitalism” (1913-1975) and the “corporate paradox” (1972-2002), before concluding with a chapter on multinationals and some closing reflections on the future of the company. This book is recommended to corporate leaders, MBA



students and those seeking to understand the rise of the modern corporation. Whether or not one agrees with the authors’ generally favourable view of the social contribution of the company, there is little doubt that the corporation has a critical role to play in finding solutions to some of today’s social challenges. In seeking to define this role, proposals for corporate reform would benefit in being based on a good understanding of the historical context of the corporation. This book helps to meet that need.

▶ **The Meaning of the 21st Century: A Vital Blueprint for Ensuring Our Future** James Martin

In this provocative book, James Martin, author of the seminal *The Wired Society* (1978), suggests that humanity is currently at a turning point, “travelling at breakneck speed” on a course that is not sustainable and that, unless it is changed, could lead to “grand-scale catastrophes”. But Martin appears not to be awed by the nature of the challenge and provides a book of solutions that he believes could realise a “great 21st century transition” and “an extraordinary future”. Highlighting the need for urgent change to address such concerns as rapidly depleting water resources, climate change, religious belligerence and greater access to weapons, Martin places great faith in our ability to unlock new technologies. These technologies include nanotechnology, biotechnology, robotic factories, regenerative medicine and intense forms of computerised intelligence. He suggests, for

example, that although by mid-century much harm will have been caused by climate change, by then the fuels that contribute to climate change will be largely obsolete and replaced by various forms of clean energy. While he believes that the solutions exist, he cautions that the most important decision-makers have little understanding of these solutions and little incentive to apply them. Many of those who share Martin’s concern that our current development path is not sustainable might not share his faith in the ability of technology to deliver. But they should be stimulated, if not provoked, by his suggestions.

▶ **The High-purpose Company: The Truly Responsible (and Highly Profitable) Firms That Are Changing Business Now** Christine Arena

Corporate strategist and researcher Christine Arena has drawn together the findings of her research into the corporate social responsibility practices (CSR) of 75 well-known companies. Arguing that real CSR is about change and not charity, she reviews the activities adopted by some of the world’s most forward thinking firms. In her book she illustrates how some of the most successful companies are driven by “a purpose that’s bigger than the end product”, while most other companies simply pretend to be. Through her various case studies, in which she defies some of the common perceptions as to who are the most socially responsible companies, she highlights the inter-relationship between doing good and ensuring financial success.