

Natural Capital Valuing The Planet

With global wildlife populations and biodiversity riches in peril, it is obvious that innovative methods of addressing our planet's environmental problems are needed. But is “the market” the answer? Nature™ Inc. brings together cutting-edge research by respected scholars from around the world to analyze how “neoliberal conservation” is reshaping human–nature relations.

In 2005, The Millennium Ecosystem Assessment (MA) provided the first global assessment of the world's ecosystems and ecosystem services. It concluded that recent trends in ecosystem change threatened human wellbeing due to declining ecosystem services. This bleak prophecy has galvanized conservation organizations, ecologists, and economists to work toward rigorous valuations of ecosystem services at a spatial scale and with a resolution that can inform public policy. The editors have assembled the world's leading scientists in the fields of conservation, policy analysis, and resource economics to provide the most intensive and best technical analyses of ecosystem services to date. A key idea that guides the science is that the modelling and valuation approaches being developed should use data that are readily available around the world. In addition, the book documents a toolbox of ecosystem service mapping, modeling, and valuation models that both The Nature Conservancy and the World Wide Fund for Nature (WWF) are beginning to apply around the world as they transform conservation from a biodiversity only to a people and ecosystem services agenda. The book addresses land, freshwater, and marine systems at a variety of spatial scales and includes discussion of how to treat both climate change and cultural values when examining tradeoffs

among ecosystem services.

The book compiles the main ideas and methodologies that have been proposed and tested within these last fifteen years in the field of Digital Soil Mapping (DSM). Beginning with current experiences of soil information system developments in various regions of the world, this volume presents states of the art of different topics covered by DSM: Conception and handling of soil databases, sampling methods, new soil spatial covariates, Quantitative spatial modelling, Quality assessment and representation of DSM outputs. This book provides a solid support to students, researchers and engineers interested in modernising soil survey approaches with numerical techniques. It is also of great interest for potential soil data users. * A new concept to meet the worldwide demand for spatial soil data * The first compilation of ideas and methodologies of Digital Soil Mapping * Offers a variety of specialities: soil surveying, geostatistics, data mining, fuzzy logic, remote sensing techniques, Geographical Information Science,... * Written by 82 researchers from 13 different countries

"The new book Mapping Ecosystem Services provides a comprehensive collection of theories, methods and practical applications of ecosystem services (ES) mapping, for the first time bringing together valuable knowledge and techniques from leading international experts in the field." (www.eurekalert.org).

Challenging historic assumptions about human relationships with nature, Jan G. Laitos examines how environmental laws have addressed environmental problems in the past, and the reasons for the laws' inability to successfully prevent environmental contamination and alterations of critical environmental systems. This forward-thinking book offers a creative and organic alternative to traditional but ultimately unsuccessful environmental rules. It explains the

need for a new generation of environmental laws grounded in the universal laws of nature which might succeed where past and current approaches have largely failed.

What can we really do about the climate emergency? The inconvenient truth is that we are causing the climate crisis with our carbon intensive lifestyles and that fixing – or even just slowing – it will affect all of us. But it can be done.

Natural capital is what nature provides to us for free. Renewables—like species—keep on coming, provided we do not drive them towards extinction. Non-renewables—like oil and gas—can only be used once. Together, they are the foundation that ensures our survival and well-being, and the basis of all economic activity. In the face of the global, local, and national destruction of biodiversity and ecosystems, economist Dieter Helm here offers a crucial set of strategies for establishing natural capital policy that is balanced, economically sustainable, and politically viable. Helm shows why the commonly held view that environmental protection poses obstacles to economic progress is false, and he explains why the environment must be at the very core of economic planning. He presents the first real attempt to calibrate, measure, and value natural capital from an economic perspective and goes on to outline a stable new framework for sustainable growth. Bristling with ideas of immediate global relevance, Helm's book shifts the parameters of current environmental debate. As inspiring as his trailblazing *The Carbon Crunch*, this volume will be essential reading for anyone concerned with reversing the headlong destruction of our environment.

A radical new approach to tackling the growing threat of water scarcity Water is essential to life, yet humankind's relationship with water is complex. For millennia, we have perceived it as abundant and easily accessible. But water shortages are fast becoming a persistent reality for

all nations, rich and poor. With demand outstripping supply, a global water crisis is imminent. In this trenchant critique of current water policies and practices, Edward Barbier argues that our water crisis is as much a failure of water management as it is a result of scarcity. Outdated governance structures and institutions, combined with continual underpricing, have perpetuated the overuse and undervaluation of water and disincentivized much-needed technological innovation. As a result “water grabbing” is on the rise, and cooperation to resolve these disputes is increasingly fraught. Barbier draws on evidence from countries across the globe to show the scale of the problem, and outlines the policy and management solutions needed to avert this crisis.

Companies that will succeed in the long-term are integrating natural and social capital into their business model now. Natural capital, the resources and critical support services nature provides, underpins our entire global economy. Yet despite its vast social and economic value, the many benefits of natural capital are often assumed to be 'free'. The future shock for business is the potential for profit to be wiped out as natural capital is internalized through regulation and markets. Freshwater, forests and biodiversity are being consumed at an alarming rate, and critical support systems such as the ability to regulate climate are failing. As these and other sustainability challenges develop, businesses and their investors need to understand their role in maintaining natural capital and their natural capital risks and opportunities. The language of finance provides a useful approach for communicating trade-offs and prioritizing sustainability at CFO, CEO and board level: companies who 'future-proof' now will position themselves to thrive in a resource-constrained world. They will mitigate risk, secure their resource supplies, create long-term value and enhance their resilience, reputation

and competitive advantage. This book provides a succinct introduction to natural capital: what natural capital is and how it links to other capitals; the business case for using it in decision-making; where natural capital accounting and valuation fit in the sustainability and financial toolbox; and what real life early adopters of natural capital in business are doing. Views from natural capital leaders across business, finance, accounting, government, research and NGO communities illustrate the theory with practice. Included: Quotes and case examples from CFOs, CEOs and Heads of Sustainability in early adopter businesses (Kingfisher Group, Dow Chemical Company, The Crown Estate, Patagonia®, United Utilities and Marks & Spencer) and financial institutions (Inter-American Development Bank, Citi Group and Credit Suisse). Resource-management decisions, especially in the area of protecting and maintaining biodiversity, are usually incremental, limited in time by the ability to forecast conditions and human needs, and the result of tradeoffs between conservation and other management goals. The individual decisions may not have a major effect but can have a cumulative major effect. Perspectives on Biodiversity reviews current understanding of the value of biodiversity and the methods that are useful in assessing that value in particular circumstances. It recommends and details a list of components-including diversity of species, genetic variability within and among species, distribution of species across the ecosystem, the aesthetic satisfaction derived from diversity, and the duty to preserve and protect biodiversity. The book also recommends that more information about the role of biodiversity in sustaining natural resources be gathered and summarized in ways useful to managers. Acknowledging that decisions about biodiversity are necessarily qualitative and change over time because of the nonmarket nature of so many of the values, the committee recommends periodic reviews of management decisions.

Global warming, overpopulation, the biodiversity crisis... the world we live in is in a state of emergency. This is not just an ecological problem; it is an economic problem as well. The state of the natural world impacts – and is impacted by – human society. Our actions have long-term consequences, so we must be wise in the choices we make, not least in the companies/practices we support through our investment decisions. In *The Ethical Investor's Handbook*, author Morten Strange connects the dots, to show how economics and finance play a direct role in perpetuating this crisis. What can we as individual investors do to avoid wrecking the Earth while growing our wealth? How can we navigate the capital allocation space without compromising our ethical values? It can be done – some of the Big Boys have done it – and this invaluable new book shows us how. Delving into topics such as alternative energy sources, conservation and natural capital, *The Ethical Investor's Handbook* offers practical advice on how to build a sustainable green portfolio that reaps handsome returns. There are pitfalls and stranded assets to avoid, but also new opportunities if you know where to find them. Do-gooders, with the right understanding of the issues at hand, can make a good buck!

From Indian vultures to Chinese bees, Nature provides the 'natural services' that keep the economy going. From the recycling miracles in the soil; an army of predators ridding us of unwanted pests; an abundance of life creating a genetic codebook that underpins our food, pharmaceutical industries and much more, it has been estimated that these and other services are each year worth about double global GDP. Yet we take most of Nature's services for granted, imagining them free and limitless ... until they suddenly switch off. This is a book full of immediate, impactful stories, containing both warnings (such as in the tale of India's vultures,

killed off by drugs given to cattle, leading to an epidemic of rabies) but also the positive (how birds protect fruit harvests, coral reefs protect coasts from storms and how the rainforests absorb billions of tonnes of carbon released from cars and power stations). Tony Juniper's book will change whole way you think about life, the planet and the economy

Countries regularly track gross domestic product (GDP) as an indicator of their economic progress, but not wealth—the assets such as infrastructure, forests, minerals, and human capital that produce GDP. In contrast, corporations routinely report on both their income and assets to assess their economic health and prospects for the future. Wealth accounts allow countries to take stock of their assets to monitor the sustainability of development, an urgent concern today for all countries. The Changing Wealth of Nations 2018: Building a Sustainable Future covers national wealth for 141 countries over 20 years (1995†“2014) as the sum of produced capital, 19 types of natural capital, net foreign assets, and human capital overall as well as by gender and type of employment. Great progress has been made in estimating wealth since the fi rst volume, *Where Is the Wealth of Nations? Measuring Capital for the 21st Century*, was published in 2006. New data substantially improve estimates of natural capital, and, for the fi rst time, human capital is measured by using household surveys to estimate lifetime earnings. The Changing Wealth of Nations 2018 begins with a review of global and regional trends in wealth over the past two decades and provides examples of how wealth accounts can be used for the analysis of development patterns. Several chapters discuss the new work on human capital and its application in development policy. The book then tackles elements of natural capital that are not yet fully incorporated in the wealth accounts: air pollution, marine fi sheries, and ecosystems. This book targets policy makers but will engage

anyone committed to building a sustainable future for the planet.

In 2004, U.S. consumers spent \$5.2 billion purchasing bottled water while the government only invested 5 percent of that amount to purchase critical watersheds, parks, and wildlife refuges—systems vital to clean water and healthy environments. How can we reverse the direction of such powerful economic forces? A group of dedicated business-people-turned-environmental-entrepreneurs is pioneering a new set of tools for land conservation deals and other market-based strategies. These pragmatic visionaries have already used these methods to protect millions of acres of land and to transform the practices of entire industries. They are transforming the very nature of conservation by making it profitable. Drawing on his vast experience in both business and land conservation at The Nature Conservancy (TNC), William Ginn offers a practical guide to these innovative methods and a road map to the most effective way to implement them. From conservation investment banking, to emerging markets for nature's goods and services, to new tax incentives that encourage companies to do the "right" thing, Ginn goes beyond the theories to present real-world applications and strategies. And, just as importantly, he looks at the lessons learned from what has not worked, including his own failed efforts in Papua New Guinea and TNC's controversial compatible development approach in Virginia. In an era of dwindling public resources and scarce charitable dollars, these tools reveal a new, and perhaps the only, pathway to achieving biodiversity goals and protecting our lands. Conservation professionals, students of land conservation, and entrepreneurs interested in green business will find Ginn's tales of high-finance deals involving vast tracts of pristine land both informative and exciting. More than just talk, *Investing in Nature* will teach you how to think big about land conservation.

How can environmental degradation be stopped? How can it be reversed? And how can the damage already done be repaired? The authors of this volume argue that a two-pronged approach is needed: reducing demand for ecosystem goods and services and better management of them, coupled with an increase in supply through environmental restoration. Restoring Natural Capital brings together economists and ecologists, theoreticians, practitioners, policy makers, and scientists from the developed and developing worlds to consider the costs and benefits of repairing ecosystem goods and services in natural and socioecological systems. It examines the business and practice of restoring natural capital, and seeks to establish common ground between economists and ecologists with respect to the restoration of degraded ecosystems and landscapes and the still broader task of restoring natural capital. The book focuses on developing strategies that can achieve the best outcomes in the shortest amount of time as it:

- considers conceptual and theoretical issues from both an economic and ecological perspective
- examines specific strategies to foster the restoration of natural capital and offers a synthesis and a vision of the way forward

Nineteen case studies from around the world illustrate challenges and achievements in setting targets, refining approaches to finding and implementing restoration projects, and using restoration of natural capital as an economic opportunity. Throughout, contributors make the case that the restoration of natural capital requires close collaboration among scientists from across disciplines as well as local people, and when successfully executed represents a practical, realistic, and essential tool for achieving lasting sustainable development.

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.

An impressive piece of work that deserves to be on every European agricultural economist's bookshelf. Jean-Christophe Bureau, *European Review of Agricultural Economics* This is an excellent text that could be used in specialist

academic courses in environmental and natural resource economics, ecological economics and cost benefit analysis, as well as in interdisciplinary courses in public policy, planning and environmental management. David James, *Australasian Journal of Environmental Management* Cost Benefit Analysis (CBA) is one of the most useful tools of applied economics for the social appraisal of public projects and government policies. Nick Hanley and Edward Barbier show how CBA can be applied to environmental policy choice and environmental resource management. They cover the conceptual underpinnings of CBA, practical methods for applying CBA, and a wide range of case study applications from Europe, North America and developing countries. Issues such as the value of ecosystem services and the special problems posed for CBA by environmental management are brought into close focus. The textbook is aimed at students on inter-disciplinary courses as well as those studying environmental economics, welfare economics and public policy. It will also be of interest to people in the policy community, NGOs and consultancy sectors.

A revelatory study of how climate change will affect individual economic decisions, and the broad impact of those choices Selected by Publishers Weekly as one of its Top Ten books in Business and Economics for Spring 2021 It is all but certain that the next century will be hotter than any we've experienced before.

Even if we get serious about fighting climate change, it's clear that we will need to adapt to the changes already underway in our environment. This book considers how individual economic choices in response to climate change will transform the larger economy. Using the tools of microeconomics, Matthew E. Kahn explores how decisions about where we live, how our food is grown, and where new business ventures choose to locate are impacted by climate change. Kahn suggests new ways that big data can be deployed to ease energy or water shortages to aid agricultural operations and proposes informed policy changes related to public infrastructure, disaster relief, and real estate to nudge land use, transportation options, and business development in the right direction.

Looks at the impact of the disappearing honeybee population--which could end agriculture as we know it, threatening our civilization and way of life--in a book that draws on the authors' cross-continental investigation into the problem and addresses the various causes, including pesticides, climate change, and more. Reflecting the very latest research, this book provides an in-depth review of the role of resilience in the management of social-ecological systems and the ecosystem services they provide. Leaders in the field outline seven principles for building resilience in social-ecological systems, examining how these can be applied to advance sustainability.

This publication outlines an action agenda for governments, business, and civil society to restore and sustain ecosystem services: the benefits people receive from nature such as fresh water, food, protection from floods, and spiritual enrichment. The action agenda responds to the Millennium Ecosystem Assessment finding that globally nearly two thirds of ecosystem services assessed were degraded. The agenda is informed by the recommendations of 17 policy experts from around the globe.

What can we really do about the climate emergency? The inconvenient truth is that we are causing the climate crisis with our carbon intensive lifestyles and that fixing - or even just slowing - it will affect all of us. But it can be done. In *Net Zero* the economist Professor Dieter Helm addresses the action we would all need to take, whether personal, local, national or global, if we really wanted to stop causing climate change. *Net Zero* is Professor Dieter Helm's measured, balanced view of how we stop causing climate change by adopting a net zero strategy of reducing carbon emissions and increasing carbon absorption. It is a rational look at why the past 30 years efforts has failed and why and how the next 30 years can succeed. It is a vital book for anyone who hears the clamour of Extinction Rebellion and other ecological activists, but wonders what they can actually do. *Valuing Nature* presents a new set of nature-based investment areas to help

conservationists and investors work together to tackle problems such as climate change. The book examines the scope of nature-based impact investing, offers tools for investors and organizations to consider as they develop their own projects, and shares tips on how nonprofits can successfully navigate this new space. Case studies from around the world demonstrate how we can utilize private capital to achieve more sustainable uses of our natural resources. William Ginn provides a roadmap for conservation professionals, nonprofit managers, and impact investors to improve the management of natural systems.

In addition to the many private and public landscape designs described in the first edition of *Led by the Land*, this revised edition includes new projects, among them Kim Wilkie's thought-provoking designs for the grounds of London's Natural History Museum, tracing "the passage from deep time to the present [and] to the future . . . exploring where we go next and how we can continue to survive in the narrow bands of atmosphere and topsoil that make life possible in the thin biosphere of the planet."

In the decades since Geoffrey Heal began his field-defining work in environmental economics, one central question has animated his research: "Can we save our environment and grow our economy?" This issue has become only more urgent in recent years with the threat of climate change, the accelerating loss of ecosystems, and

the rapid industrialization of the developing world. Reflecting on a lifetime of experience not only as a leading voice in the field, but as a green entrepreneur, activist, and advisor to governments and global organizations, Heal clearly and passionately demonstrates that the only way to achieve long-term economic growth is to protect our environment. Writing both to those conversant in economics and to those encountering these ideas for the first time, Heal begins with familiar concepts, like the tragedy of the commons and unregulated pollution, to demonstrate the underlying tensions that have compromised our planet, damaging and in many cases devastating our natural world. Such destruction has dire consequences not only for us and the environment but also for businesses, which often vastly underestimate their reliance on unpriced natural benefits like pollination, the water cycle, marine and forest ecosystems, and more. After painting a stark and unsettling picture of our current quandary, Heal outlines simple solutions that have already proven effective in conserving nature and boosting economic growth. In order to ensure a prosperous future for humanity, we must understand how environment and economy interact and how they can work in harmony—lest we permanently harm both.

There are no more reespected voices in the environmental movement than these authors, true counselors on the direction of twenty-first-century business. With hundreds of thousands of books sold worldwide, they have set the agenda for rational, ecologically sound industrial development. In this inspiring book they define a superior

& sustainable form of capitalism based on a system that radically raises the productivity of nature's dwindling resources. Natural Capitalism shows how cutting-edge businesses are increasing their earnings, boosting growth, reducing costs, enhancing competitiveness, & restoring the earth by harnessing a new design mentality. The authors offer dozens of examples of businesses that are making fourfold or even tenfold gains in efficiency, from self-heating & self-cooling buildings to 200-miles-per-gallon cars, while ensuring that workers aren't downsized out of their jobs. This practical blueprint shows how making resources more productive will create the next industrial revolution

Policy-makers are increasingly trying to assign economic values to areas such as ecologies, the atmosphere, even human lives. These new values, assigned to areas previously considered outside of economic systems, often act to qualify, alter or replace former non-pecuniary values. Valuing Development, Environment and Conservation looks to explore the complex interdependencies, contradictions and trade-offs that can take place between economic values and the social, environmental, political and ethical systems that inform non-monetary valuation processes. Using rich empirical material, the book explores the processes of valuation, their components, calculative technologies, and outcomes in different social, ecological and conservation domains. The book gives reasons for why economic calculation tends to dominate in practice, but also presents new insights on how the disobedient materiality of things and the

ingenuity of human and non-human agencies can combine and frustrate the dominant economic models within calculative processes. This book highlights the tension between, on the one hand, a dominant model that emphasises technical and 'universalising' criteria, and on the other hand, valuation practice in specific local contexts which is more likely to negotiate criteria that are plural, incommensurable and political. This book is perfect for researchers and students within development studies, environment, geography, politics, sociology and anthropology who are looking for new insights into how processes of valuation take place in the 21st century, and with what consequential outcomes.

Natural Capital Valuing Our Planet Yale University Press

This white paper sets out proposals for a detailed programme of action to repair damage done to the environment in the past, and urges everyone to get involved in helping nature to flourish at all levels - from neighbourhoods to national parks. The plans are directly linked to the groundbreaking research in the National Ecosystem Assessment that showed the strong economic arguments for safeguarding and enhancing the natural environment. They also act on the recommendations of 'Making Space for Nature', a report into the state of England's wildlife sites, led by Professor John Lawton and published in September 2010, which showed that England's wildlife sites are fragmented and not able to respond to the pressures of climate change and other pressures we put on our land. Key measures proposed include: i) Reconnecting

nature with New Nature Improvement Areas (NIAs) with a £7.5 million fund for 12 initial NIAs, biodiversity offsetting, New Local Nature Partnerships with £1 million available this year, phasing out peat, ii) Connecting people and nature for better quality of life with Green Areas Designation, better urban green spaces; more children experiencing nature by learning outdoors, strengthening local public health activities, the new environmental volunteering initiative "Muck in 4 Life" to improve places in towns and countryside for people and nature to enjoy and iii) Capturing and improving the value of nature with a Natural Capital Committee; an annual statement of green accounts for UK Plc, a business-led Task Force to expand the UK business opportunities from new products and services which are good for the economy and nature alike.

Hard-hitting recommendations for what must be done to manage global natural capital and reverse environmental destruction Natural capital is what nature provides to us for free. Renewables--like species--keep on coming, provided we do not drive them towards extinction. Non-renewables--like oil and gas--can only be used once. Together, they are the foundation that ensures our survival and well-being, and the basis of all economic activity. In the face of the global, local, and national destruction of biodiversity and ecosystems, economist Dieter Helm here offers a crucial set of strategies for establishing natural capital policy that is balanced, economically sustainable, and politically viable. Helm shows why the commonly held view that environmental protection poses obstacles to economic progress is false, and he explains why the

environment must be at the very core of economic planning. He presents the first real attempt to calibrate, measure, and value natural capital from an economic perspective and goes on to outline a stable new framework for sustainable growth. Bristling with ideas of immediate global relevance, Helm's book shifts the parameters of current environmental debate. As inspiring as his trailblazing *The Carbon Crunch*, this volume will be essential reading for anyone concerned with reversing the headlong destruction of our environment.

The concept of sustainability lies at the core of the challenge of environment and development, and the way governments, business and environmental groups respond to it. *Green Development* provides a clear and coherent analysis of sustainable development in both theory and practice. *Green Development* explores the origins and evolution of mainstream thinking about sustainable development and offers a critique of the ideas behind them. It draws a link between theory and practice by discussing the nature of the environmental degradation and the impacts of development. It argues that, ultimately, 'green' development has to be about political economy, about the distribution of power, and not about environmental quality. Its focus is strongly on the developing world. The fourth edition retains the broad structure of previous editions, but has been updated to reflect advances in ideas and changes in international policy. Greater attention has been given to the political ecology of development, market-based and neoliberal environmentalism, and degrowth. This fully revised edition discusses:

the origins of thinking about sustainability and sustainable development, and its evolution to the present day; the ideas that dominate mainstream sustainable development (including natural capital, the green economy, market environmentalism and ecological modernisation); critiques of mainstream ideas and of neoliberal framings of sustainability, and alternative ideas about sustainability that challenge 'business as usual' thinking, such as arguments about limits to growth and calls for degrowth; the dilemmas of sustainability in the context of forests, desertification, food and farming, biodiversity conservation and dam construction; the challenge of policy choices about sustainability, particularly between reformist and radical responses to the contemporary global dilemmas. Green Development offers clear insights into the challenges of environmental sustainability, and social and economic development. It is unique in offering a synthesis of theoretical ideas on sustainability and in its coverage of the extensive literature on environment and development around the world. The book has proved its value to generations of students as an authoritative, thought-provoking and readable guide to the field of sustainable development.

Discover how conservation can be made more effective through strengthening links between science research, policy and practice. This title is also available as Open Access on Cambridge Core.

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section of ecosystems and services in different sites, countries and

In a new edition of his hard-hitting book on climate change, economist Dieter Helm looks at how and why we have failed to tackle the issue of global warming and argues for a new, pragmatic rethinking of energy policy. “An optimistically levelheaded book about actually dealing with global warming.”—Kirkus Reviews, starred review “[Dieter Helm] has turned his agile mind to one of the great problems of our age: why the world's efforts to curb the carbon dioxide emissions behind global warming have gone so wrong, and how it can do better.”—Pilita Clark, Financial Times

Harris and Roach present a compact and accessible presentation of the core environmental and resource topics and more, with analytical rigor as well as engaging examples and policy discussions. They take a broad approach to theoretical analysis, using both standard economic and ecological analyses, and developing these both from theoretical and practical points of view. It assumes a background in basic economics, but offers brief review sections on important micro and macroeconomic concepts, as well as appendices with more advanced and technical material. Extensive instructor and student support materials, including PowerPoint slides, data updates, and student exercises are provided.

Introduction -- The end of the commodity super-cycle -- Binding carbon constraints -- An electric future -- The US: the lucky country -- The Middle East: more trouble to come -- Russia: blighted by the resource curse -- China: the end of the transition -- Europe: not as bad as it seems -- The gradual end of big oil -- Energy utilities: a broken model -- The new energy markets and the economics of the Internet -- Conclusion

The first fifteen years of the 21st century have thrown into sharp relief the challenges of

growth, equity, stability, and sustainability facing the world economy. In addition, they have exposed the inadequacies of mainstream economics in providing answers to these challenges. This volume gathers over 50 leading scholars from around the world to offer a forward-looking perspective of economic geography to understanding the various building blocks, relationships, and trajectories in the world economy. The perspective is at the same time grounded in theory and in the experiences of particular places. Reviewing state-of-the-art of economic geography, setting agendas, and with illustrations and empirical evidence from all over the world, the book should be an essential reference for students, researchers, as well as strategists and policy makers. Building on the success of the first edition, this volume offers a radically revised, updated, and broader approach to economic geography. With the backdrop of the global financial crisis, finance is investigated in chapters on financial stability, financial innovation, global financial networks, the global map of savings and investments, and financialization. Environmental challenges are addressed in chapters on resource economies, vulnerability of regions to climate change, carbon markets, and energy transitions. Distribution and consumption feature alongside more established topics on the firm, innovation, and work. The handbook also captures the theoretical and conceptual innovations of the last fifteen years, including evolutionary economic geography and the global production networks approach. Addressing the dangers of inequality, instability, and environmental crisis head-on, the volume concludes with strategies for growth and new ways of envisioning the spatiality of economy for the future.

Revised and updated throughout, this unique anthology examines global environmental politics from a range of perspectives (contemporary and classic, activist and scholarly) and reflects

voices of the powerless and powerful. Paradigms of sustainability, environmental security, and ecological justice illustrate the many ways environmental problems are being addressed. Rapid economic development has been a boon to human well-being, but comes at a significant cost to the fertile soils, forests, coastal marshes, and farmland that support all life on earth. If ecosystems collapse, so eventually will human civilization. One solution is inclusive green growth--the efficient use of natural resources. Its genius lies in working with nature rather than against it. Green Growth That Works is the first practical guide to bring together pragmatic finance and policy tools that can make investment in natural capital both attractive and commonplace. Pioneered by leading scholars from the Natural Capital Project, this valuable compendium of proven techniques can guide agencies and organizations eager to make green growth work anywhere in the world.

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