

Chicago Climate Exchange California Air Resources Board

This book is a product of the initial phase of a broader study evaluating the voluntary and regulatory compliance protocols that are used to account for the contributions of forests in U.S.-based greenhouse gas (GHG) mitigation programs. The research presented here is particularly concerned with these protocols' use of the USDA Forest Service's Forest Inventory and Analysis (FIA) data to describe forest conditions, ownership, and management scenarios, and is oriented towards providing regulators and other interested parties with an objective comparison of the options, uncertainties, and opportunities available to offset GHG emissions through forest management. Chapters focus on the protocols for recognizing forest carbon offsets in the California carbon cap-and-trade program, as described in the Compliance Offset Protocol; U.S. Forest Projects (California Air Resources Board, 2011). Readers will discover the protocols used for quantifying the offset of GHG emissions through forest-related project activity. As such, its scope includes a review of the current methods used in voluntary and compliance forest protocols, an evaluation of the metrics used to assign baselines and determine additionality in the forest offset protocols, an examination of key quantitative and qualitative components and assumptions, and a discussion of opportunities for modifying forest offset protocols, in light of the rapidly changing GHG-related policy and regulatory environment. Finally, the report also discusses accounting and policy issues that create potential barriers to participation in the California cap-and-trade program, and overall programmatic additionality in addressing the needs of a mitigation strategy.

Global climate governance has presented problems that have led to failures, yet it has also opened the door to new transregional governance schemes, especially in North America. This book introduces an environmental dimension into the concept of governance. Almost fifteen years after the climate global governance concept emerged, results worldwide have not been as favorable as expected. This book details previous discussions about the concept of global climate governance and its limits. It highlights how the Kyoto Protocol has a limited design taking into account a national approach to global, regional, and transnational problems, had no obligatory mechanisms for implementation and explains the emergence of new polluters not committed under it such as China and India. Furthermore this book explores other levels of authority such as regional institutions - the North American agreement on trade (NAFTA) and on environment (NAAEC), as well as the regional energy working group (NAEWG). The author puts forward a theoretical proposal for re-territorialization and coordination of policies for climate change into new forms of articulating interests in what she terms transnational green economic regions (TGERs) and tests this on two case studies - the Regional Greenhouse Gas Initiative (RGGI) and the Western Climate Initiative (WCI). This study presents the challenges and opportunities of a transregional approach in North America.

As well as taking stock of the current and proposed legal instruments, the book looks at the wider policy and economic aspects of coping with climate change. It provides a comparative overview of key issues across Europe, the United States, Asia-Pacifi

Air is our most important resource, yet it is in danger from pollution and global warming. Author Stephen Feinstein explains threats to air quality worldwide and explains what you can do to help preserve and protect this precious resource.

The Cultures of Markets

Carbon Finance

Institutions, Policymaking, and Multilevel Governance

Oxford Handbook of Comparative Environmental Law
Encyclopedia of Global Warming and Climate Change
Comparative Analysis and Linking Perspectives
Metrics for Sustainable Business

Praise for Carbon Finance "A timely, objective, and informative analysis of the financial opportunities and challenges presented by climate change, including a thorough description of adaptive measures and insurance products for managing risk in a carbon constrained economy." —James R. Evans, M. Eng. P. Geo., Senior Manager, Environmental Risk Management, RBC Financial Group "Climate change will have enormous financial implications in the years to come. How businesses and investors respond to the risks and opportunities from this issue will have an enormous rippling effect in the global economy. Sonia Labatt and Rodney White's insights and thoughtful analysis should be read by all who want to successfully navigate this global business issue." —Andrea Moffat, Director, Corporate Programs, Ceres "In Carbon Finance, Labatt and White present a clear and accessible description of the climate change debate and the carbon market that is developing. Climate change is becoming an important factor for many financial sector participants. The authors illustrate how challenges and opportunities will arise within the carbon market for banking, insurance, and investment activities as well as for the regulated and energy sector of the economy."

—Charles E. Kennedy, Director and Portfolio Manager, MacDougall, MacDougall & MacTier Inc.

"Climate change is the greatest environmental challenge of our generation. Its impact on the energy sector has implications for productivity and competitiveness. At the same time, environmental risk has emerged as a major challenge for corporations in the age of full disclosure. Carbon Finance explains how these disparate forces have spawned a range of financial products designed to help manage the inherent risk. It is necessary reading for corporate executives facing challenges that are unique in their business experience." —Skip Willis, Managing Director Canadian Operations, ICF International "In this timely publication, Labatt and White succeed in communicating the workings of carbon markets, providing simple examples and invaluable context to the new and changing mechanisms that underpin our transformation to a carbon-constrained world. Carbon Finance will be the definitive guide to this field for years to come." —Susan McGeachie, Director, Innovest Strategic Value Advisors, Graduate Faculty Member, University of Toronto; and Jane Ambachtsheer, Principal, Mercer Investment Consulting, Graduate Faculty Member, University of Toronto

Climate Change Policy in North America is the first book to examine how cooperation respecting climate change can emerge within decentralized governance arrangements.

Also available via the World Wide Web.

Analysis of climate change policy innovations across North America at transnational, federal, state, and local levels, involving public, private, and civic actors. North American policy responses to global climate change are complex and sometimes contradictory and reach across multiple levels of government. For example, the U.S. federal government rejected the Kyoto Protocol and mandatory greenhouse gas (GHG) restrictions, but California developed some of the world's most comprehensive climate change law and regulation; Canada's federal government ratified the Kyoto Protocol, but Canadian GHG emissions increased even faster than those of the United States; and Mexico's state-owned oil company addressed climate change issues in the 1990s, in stark contrast to leading U.S. and Canadian energy firms. This book is the first to examine and compare political action for climate change across North America, at levels ranging from continental to municipal, in locations ranging from Mexico to Toronto to Portland, Maine. Changing Climates in North American Politics investigates new or emerging institutions, policies, and practices in North American climate governance; the roles played by public, private, and civil society actors; the diffusion of policy across different jurisdictions; and the effectiveness of multilevel North American climate change governance. It finds that although national climate policies vary widely, the complexities and divergences are even greater at the subnational level. Policy initiatives are developed separately in states, provinces, cities, large corporations, NAFTA bodies, universities, NGOs, and private firms, and this lack of coordination limits the effectiveness of multilevel climate change governance. In North America, unlike much of Europe, climate change governance has been largely bottom-up rather than top-down. Contributors Michele Betsill, Alexander Farrell, Christopher Gore, Michael Hanemann, Virginia Haufler, Charles Jones, Dovev Levine,

David Levy, Susanne Moser, Annika Nilsson, Simone Pulver, Barry Rabe, Pamela Robinson, Ian Rowlands, Henrik Selin, Peter Stoett, Stacy VanDeveer

Making Money on Green Chip Stocks

Environmental Impact Statement

What You Can Do

Legal Aspects of Carbon Trading

Introduction to Environmental Management

Understanding and Analysis: The California Air Resources Board Forest Offset Protocol

Energy and Emissions Markets

Written by best selling author Peter C. Fusaro and renowned energy market expert and commentator Tom James, this book demonstrates that the forces of energy and environmental issues are linked more than ever before. The beginning of European emissions trading in 2005 and the implementation of the Kyoto protocol have accelerated efforts already underway in the US to use market forces to remediate environmental issues. Topics such as emissions trading, renewable energy trading, the fourth dimension in energy trading, and new outcomes on green project finance will be analyzed in this book. This overview of global warming and its human causes examines the international agreements regarding climate change and the U.S. response to those agreements, as well as key provisions of the Kyoto Protocol, to explain the difficulties of any subsequent treaties. Framing the scientific debate against moral, ethical, and religious considerations, the book offers potential solutions. The book includes seven maps and tables, notes, bibliography, and index.

Science and Business of Carbon Forestry is a comprehensive guide on biodiversity, conservation and development, and regulation-related issues relevant to forests. It gives detailed guidance on the development, marketing, and financials related to projects in the forestry sector, with a focus on addressing problems related to climate change and forestry. Drawing on a wealth of information from studies across the globe, this book has been authored by a multi-sectoral team of practitioners, academics, economists, and other social/technical experts experienced in carbon markets, climate protection, forestry, project development, and environmental law. The book will serve the needs of various departments and agencies of relevant forest, agriculture, and horticulture departments, and related governmental organizations and non-governmental organizations. This book would not have been possible without the dedication and commitment of each of the chapter authors. For some authors, writing a chapter was beyond their "9-5" job, and this book reflects their commitment to sustainability at the local level for their communities. To every chapter author and their staff, friends, and families, thank you. This dynamic and paradigm-changing volume on the topic of sustainable development is focused on communities such as cities, schools, and colleges where the future of our families and children are most at risk. We must act today as each of the chapters represents in their presentations. This book marks a new era: the Third Industrial Revolution. The new age of the Third Industrial Revolution has been labeled by some as the "green era" or "green economy," but it

had already started around the world, especially in Europe and Japan, for over a decade – since the end of the 20th century. More significantly, the book highlights people and communities who have a shared concern and vision along with the will and determination to enact programs and policies that make sustainable development real – not just political rhetoric or “branding” or even the current “buzz word” for obtaining funds and grants. The book presents “The Sequel to an Inconvenient Truth” – actual examples of how communities can and have changed in order to mitigate climate change. Again, thanks to everyone and their colleagues.

The Political Economy of Climate Governance

American Business Regulation

The Clean Air Act Handbook

A Primer for Airports

Trading in Air

Hearing Before the Subcommittee on Department Operations, Oversight, Nutrition, and Forestry of the Committee on Agriculture, House of Representatives, One Hundred Eleventh Congress, First Session, June 3, 2009

Global Climate Change and U.S. Law

In this timely book, Sven Rudolph and Elena Aydos take an interdisciplinary approach that combines sustainability economics, political economy, and legal concepts to answer two fundamental questions: How can carbon markets be designed to be effective, efficient and just at the same time? And how can the political barriers to sustainable carbon markets be overcome? The authors advance existing theoretical frameworks and examine empirical data from various real-life emissions trading schemes, identifying strategies and policy windows for implementing truly sustainable ETS.

This Handbook is the first comprehensive account of comparative environmental law. It examines in detail the methodological foundations of the discipline as well as the substance of environmental law across countries from four vantage points: country studies from all continents, responses to common problems (including air pollution, water management, nature conservation, genetically modified organisms, climate change and energy, chemicals, waste), foundational components of environmental law systems (including principles, property rights, administrative and judicial organisation, command-and-control regulation, market mechanisms, informational techniques and liability mechanisms), and common interactions of environmental protection with the broader public, private, and criminal law contexts. The volume brings together the foremost authorities in this field from around the world to provide a concise, self-contained, and technically rigorous account of environmental law as a single overall system. "The primer is intended to provide a comprehensive overview of the evolving greenhouse gas (GHG) credit or carbon credit and related markets; describe the role airports play in these markets; [and] identify areas where U.S. airports may be able to participate and capture additional revenue or other forms of reputational or environmental stewardship value from these markets"--P. 5.

This comprehensive, current examination of U.S. law as it relates to global climate change begins with a summary of the factual and scientific background of climate change based on governmental statistics and other official sources. Subsequent chapters address the international and national frameworks of climate change law, including the Kyoto Protocol, state programs affected in the absence of a mandatory federal program, issues of disclosure and corporate governance, and the insurance industry. Also covered are the legal aspects of other efforts, including voluntary programs, emissions trading programs, and carbon sequestration.

Solving the Air Pollution Problem

Trading Systems, Funds, Protocols and Standards

Governing Climate Change

A Comprehensive Action Plan for Towns, Cities, and Regions

Sustainable and Resilient Communities

Power, Knowledge, Norms, Discourses

The Economic, Social and Political Elements of Climate Change

Since 2005 the carbon market has grown to a value of nearly \$100 billion per annum, including the EU Emissions Trading Scheme and other schemes. This work covers the legal aspects of these schemes, as well as reform of the ETS, and the successor regime to the 1997 Kyoto Protocol currently being negotiated. It will be invaluable to those involved in the field.

This book explores the establishment of emissions trading as a form of environmental, market-based governance. It conceptualizes markets as institutions, and analyzes them as a system of climate governance. To this end, it argues that international efforts to promulgate markets run up against local cultures of markets that shape economic practices and knowledge to different degrees. The book also examines the material implications of emissions markets on the environment and climatic systems. In sum, the study finds that cultures of markets present a substantial challenge to a universalist prescription for resolving climate change and highlights issues at the interface of political and economic governance in different political economies. This includes issues of citizen, state, and industry participation, and the materiality of economic and financial productivity.

Written by a practicing business attorney with startup experience in the environmental and technology sectors, this comprehensive handbook assists entrepreneurs in tackling the wide variety of opportunities to go green. A one-stop resource for entrepreneurs, it helps readers incorporate clean technology, environmental practices, and green business approaches into the work environment. The book discusses how to sell to utilities, explores fundraising outlets for green businesses, covers government incentives, presents key startup tools aimed at green businesses, and addresses challenges of many new businesses, such as raising money and making sales. Additional resources are available on the book's website.

Given the rapid spread of ETSs in an increasing number of countries and the important role that they are likely to play for the success or failure of the environmental policy in the years to come, this book provides an interdisciplinary analysis of the EU ETS from both the legal and economic perspectives comparing it

with the other main ETSs existing worldwide, in order to assess whether the EU ETS has truly represented a prototype for the other ETSs established around the world and to investigate the current perspectives for linking them in the future. Through the years, the EU ETS has progressively gained a paramount position within the EU environmental policy and climate change legislation and currently represents the most striking flagship in this sector, with more than 11.000 installations covered by the scheme. In parallel, the EU ETS has paved the way for the establishment of many other ETSs in several other jurisdictions. Such schemes are now recognized worldwide as the “ cornerstones ” of the climate change policy.

Hearing Before the Committee on Agriculture, House of Representatives, One Hundred Eleventh Congress, First Session, June 11, 2009

Coordinated Agricultural Research through GRACEnet to Address our Changing Climate

Green Entrepreneur Handbook

A Transregional Approach

Changing Climates in North American Politics

The Social Construction of Climate Change

Sustainable Communities

Understanding and Analysis: The California Air Resources Board Forest Offset Protocol Springer

World's foremost experts explain how polycentric thinking can enhance societal attempts to govern climate change, for researchers, practitioners, advanced students. This title is also available as Open Access.

A unique feature of this book is its strong practice-oriented nature: it contains a wide range of papers dealing with the social, economic and political aspects of climate change, exemplifying the diversity of approaches to climate change management taking place all over the world, in a way never seen before. In addition, the book describes a number of projects and other initiatives happening in Africa, Asia, Europe, Latin American and the Australasian region, providing a profile of the diversity of works taking place today.

It is hard to imagine an area of study or a discipline in which a basic knowledge of the issues would not be beneficial, since environmental concerns are very much in the public consciousness.

Written at a level that is accessible to students in all disciplines, Introduction to Environmental Management translates complex environmental issues i

Climate Change Policy in the United States

Mitigating Climate Change Through the Carbon Markets

Polycentricity in Action?

Hearing to Review the Future of Our Nation's Forests

Measures and Standards for the Assessment of Organizations

Managing Agricultural Greenhouse Gases

Global climate change is a natural process that currently appears to be strongly

influenced by human activities, which increase atmospheric concentrations of greenhouse gases (GHG). Agriculture contributes about 20% of the world's global radiation forcing from carbon dioxide, methane and nitrous oxide, and produces 50% of the methane and 70% of the nitrous oxide of the human-induced emission. Managing Agricultural Greenhouse Gases synthesizes the wealth of information generated from the GRACEnet (Greenhouse gas Reduction through Agricultural Carbon Enhancement network) effort with contributors from a variety of backgrounds, and reports findings with important international applications. Frames responses to challenges associated with climate change within the geographical domain of the U.S., while providing a useful model for researchers in the many parts of the world that possess similar ecoregions Covers not only soil C dynamics but also nitrous oxide and methane flux, filling a void in the existing literature Educates scientists and technical service providers conducting greenhouse gas research, industry, and regulators in their agricultural research by addressing the issues of GHG emissions and ways to reduce these emissions Synthesizes the data from top experts in the world into clear recommendations and expectations for improvements in the agricultural management of global warming potential as an aggregate of GHG emissions

Greenhouse gas (GHG) offsets have long been promoted as an important element of a comprehensive climate policy approach. Offset programs can reduce the overall cost of achieving a given emission goal by enabling emission reductions to occur where costs are lower. Offsets have the potential to deliver sustainability co-benefits, through technology development and transfer. They can also develop human and institutional capacity for reducing emissions in sectors and locations not included in a cap and trade or a mandatory government policy. However, offsets can pose a risk to the environmental integrity of climate actions, especially if issues surrounding additionality, permanence, leakage, quantification and verification are not adequately addressed. The challenge is to design offset programs and policies that can maximize their potential benefits while minimizing their potential risks. This handbook provides a systematic and comprehensive review of existing offset programs. It looks at what offsets are, how offset mechanisms function, and the successes and pitfalls they have encountered. Coverage includes offset programs across the full swath of applications including mandatory and voluntary systems, government regulated and private markets, carbon offset funds, and accounting and reporting protocols such as the WBCSD/WRI GHG Protocol and ISO 14064. Learning from the successes and failures of these programs will be essential to crafting effective climate policy. This is an essential reference for all regulators, policy makers, business leaders and NGOs concerned with the design and operation of GHG offset programs world-wide. Published with SEI

Many of today's communities face an unprecedented struggle to adapt and maintain their environmental, economic, and social well-being in an era beleaguered by fiscal constraints, uncertainty about energy prices and supplies, rapid demographic shifts, and accelerated climate impacts. This step-by-step guidebook for urban planners and urban designers explains how to create and implement an actionable plan for making neighborhoods, communities, and regions more environmentally healthy, resource-conserving, and economically resilient. Sustainable and Resilient Communities delineates measures for repairing, retrofitting, and transforming our built environments and supporting systems.

Individuals, international organizations and states are calling for the world to confront climate change. Efforts such as the Kyoto Protocol have produced intractable disputes and are deemed inadequate. This volume adopts two constructivist perspectives - norm-centred and discourse - to explore the social construction of climate change from a broad, theoretical level to particular cases. The contributors contend that climate change must be understood from the context of social settings, and that we ignore at our peril how power and knowledge structures are generated. They offer a greater understanding of why current efforts to mitigate climate change have failed and provide academics and policy makers with a new understanding of this important topic.

The Practical Legal Guide

Emissions of Greenhouse Gases in the United States, 2006

Handbook of Carbon Offset Programs

Collision or Convergence?

Understand, Survive and Thrive

The Carbon Market

The Science, the Politics and the Prospects for Change

Investing in Renewable Energy puts the depletion of finite resources such as oil, natural gas, and coal in perspective, and discusses how renewable energy solutions—from solar and wind to geothermal and biofuels—will usher in a new generation of wealth for investors and a new way of life for everyone. With this book, you'll discover various renewable energy technologies that are at the forefront of transitioning our energy economy, and learn how to profit from next-generation renewable energy projects and companies that are poised to take over where fossil fuels will leave off.

2008 Best Reference, Library Journal "The impact of global warming is rapidly evolving. This valuable resource provides an excellent historical overview and framework of this topic and serves as a general resource for geography, oceanography, biology, climatology, history, and many other subjects. A useful reference for a wide audience of business professionals and government officials as well as for the general public; essential for both academic and public libraries." —Library Journal "This is a useful set because of the individual country entries as well as the general-audience language . . ." — Booklist (Starred Review) The Encyclopedia of Global Warming and Climate Change helps readers learn about the astonishingly intricate processes that make ours the only planet known to be habitable. These three volumes include more than 750 articles that explore major topics related to global warming and climate change—ranging geographically from the North Pole to the South Pole, and thematically from social effects to scientific causes. Key Features Contains a 4-color, 16-page insert that is a comprehensive introduction to the complexities of global warming Includes coverage of the science and history of climate change, the polarizing controversies over climate-change theories, the role of societies, the industrial and economic factors, and the sociological aspects of climate change Emphasizes the importance of the effects, responsibilities, and ethics of climate change Presents contributions from leading scholars and institutional experts in the geosciences Serves as a general resource for geography, oceanography, biology, climatology, history, and many other subjects The Encyclopedia of Global Warming and Climate Change provides a primarily nonscientific resource to understanding the complexities of climate change for academic and public libraries. READER'S GUIDE Atmospheric Sciences Climate climate and Society Climate Change, Effects Climate Feedbacks Climate Models Countries: Africa Countries: Americas Countries: Asia Countries: Europe Countries: Pacific Glaciology Government and International

Agencies Institutions Studying Climate Change Oceanography Paleo-Climates People Programs And Conventions

Climate change presents an unprecedented global challenge, and impacts upon a wide range of human economic activity. The issue of how to address climate change in developing countries has provoked international political controversy and the urgent need for effective international responses has become increasingly apparent. The Role of Climate Change in Global Economic Governance addresses the growing number of legal and economic issues that arise with respect to climate change, combining analysis from economic, financial, and legal perspectives. The book assesses how the World Trade Organization, international investment law, and the international intellectual property rights regime approach the economic issues raised by climate change. The authors analyse how climate change regulation interacts with international economic law, and consider how financial instruments and insurance can mitigate the risks posed by climate change and facilitate adaptation. It breaks new ground in considering the financial sector's response to climate change, looking at how market mechanisms and risk insurance can reduce its economic cost.

Metrics for Sustainable Business is the first book to give students a comprehensive understanding of sustainability in organizations from an accounting perspective. The book walks student through the steps for doing a sustainability assessment, and aims to develop them into financial analysts who understand sustainability reports, and are able to create or audit them. While most books focus on environmental issues, Herriott trains his gaze on the corporate and institutional perspective, covering measurement systems, how to evaluate and improve a standard, and conducting a life cycle assessment. Walking students through the programs of disclosure, the varying standards for corporate ratings, and organizational certification, allows them to grasp the tools for conducting a sustainability assessment and auditing reports. Chapters on accounting for greenhouse gas emissions, water use, and waste introduce students to the technical details in sustainability accounting, while a chapter on the philosophies of sustainability offers an answer to the question, "Why are they asking us to report that?" Richly demonstrated with practical examples and informative visuals, this book will serve students of sustainability, accounting, and integrated reporting.

Kyoto, Copenhagen, and Beyond

Climate Change Policy in North America

The Financial Implications of Climate Change

Hearing to Review Pending Climate Legislation

Carbon Markets Around the Globe

Research Handbook on Climate Change Mitigation Law

Newhall Ranch Resource Management and Development Plan and Spineflower Conservation Plan

The legal and economic landscape for building and development have fundamentally been altered by the country's major environmental problems - climate change, deforestation, loss of biodiversity, ozone depletion, pollution, and unsustainable natural resource consumption rates. The editors provide practical information for lawyers to assist their clients in fully understanding green building and sustainable development concepts so they can operate successfully in the evolving economic and regulatory environment while minimizing the potential cost penalty of business-as-usual practices. While there are lengthy texts discussing the economics of why and how

governments regulate business and apply antitrust, this book is unique in providing the details of current business regulation in many industries through lengthy examples the author develops with the use of cases, including Harvard Business School cases. Students are then guided to devise business strategies of introducing new products within the scope of regulation (known or unknown). While the economic theories of regulation are covered, the focus of this text is a "hands-on coping" with regulation and using regulation as a business strategy to deal with competitors. Online instructor's materials are also available for adopters.

A current guide to one of the most complicated and extensive pieces of environmental legislation ever written, this broad and balanced perspective to the statute that brings together the experience of over two dozen private and public sector.

Sustainability and Political Feasibility

Investing in Renewable Energy

The Guide to Building and Growing a Green and Clean Business

Green Building and Sustainable Development

Science and Business of Forestry Carbon Projects

Reconfiguring Global Climate Governance in North America

The Role of Climate Change in Global Economic Governance