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**KEY=OF - ELLEN ROMAN**

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## The Skeptical Environmentalist Measuring the Real State of the World

*Cambridge University Press* **The Skeptical Environmentalist challenges widely held beliefs that the environmental situation is getting worse and worse. The author, himself a former member of Greenpeace, is critical of the way in which many environmental organisations make selective and misleading use of the scientific evidence. Using the best available statistical information from internationally recognised research institutes, Bjørn Lomborg systematically examines a range of major environmental problems that feature prominently in headline news across the world. His arguments are presented in non-technical, accessible language and are carefully backed up by over 2500 footnotes allowing readers to check sources for themselves. Concluding that there are more reasons for optimism than pessimism, Bjørn Lomborg stresses the need for clear-headed prioritisation of resources to tackle real, not imagined problems. The Skeptical Environmentalist offers readers a non-partisan stocktaking exercise that serves as a useful corrective to the more alarmist accounts favoured by campaign groups and the media.**

## The Population Bomb

## Indoor Pollutants

*National Academies Press* **Discusses pollution from tobacco smoke, radon and radon progeny, asbestos and other fibers, formaldehyde, indoor combustion, aeropathogens and allergens, consumer products, moisture, microwave radiation, ultraviolet radiation, odors, radioactivity, and dirt and discusses means of controlling or eliminating them.**

## Surviving Success

## Policy Reform and the Future of Industrial Pollution in China

*World Bank Publications*

## The Sheep Look Up

**Food and crops, water and scarce resources--all are undergoing major stresses due to human incompetence and greed. In "The Sheep Look Up," Brunner describes the lives of the people in the midst of ecological catastrophe and their attempts to come to terms with their environment. This is the first limited edition of "The Sheep Look Up" ever published. This edition features an introduction by Kim Stanley Robinson, one of science fiction's best-known writers. The book is also signed by Robinson and features an interview with Brunner, a column by John Brunner, and a short autobiography with photographs.**

## Drawdown

## The Most Comprehensive Plan Ever Proposed to Reverse Global Warming

*Penguin UK* **NEW YORK TIMES BESTSELLER For the first time ever, an international coalition of leading researchers, scientists and policymakers has come together to offer a set of realistic and bold solutions to climate change. All of the techniques described here - some well-known, some you may have never heard of - are economically viable, and communities throughout the world are already enacting them. From revolutionizing how we produce and consume food to educating girls in lower-income countries,**

these are all solutions which, if deployed collectively on a global scale over the next thirty years, could not just slow the earth's warming, but reach drawdown: the point when greenhouse gasses in the atmosphere peak and begin to decline. So what are we waiting for?

## Methods of Measuring Environmental Parameters

*John Wiley & Sons* Provides a systematic review of modern methods and instruments for measuring environmental parameters • Profiles the most modern methods and instruments for environment control and monitoring • Gives an assessment of biotic and abiotic factors and their effect on quality of atmosphere and indoor air, soil, water • Provides a brief description of the main climatic (pressure, wind, temperature, humidity, precipitation, solar radiation), atmospheric, hydrographic, and edaphic factors • Covers a wide range environmental methods and instrumentation including those used in the fields of meteorology, air pollution, water quality, soil science and more • Supplied with practical exercises, problems, and tests that will help the reader to learn more deeply contents of the book

## The World Book Encyclopedia

An encyclopedia designed especially to meet the needs of elementary, junior high, and senior high school students.

## Bassett's Environmental Health Procedures

*Routledge* Environmental health law is a wide-ranging, detailed and complex body of law within the UK. Environmental Health Procedures is an established and essential reference source which provides an accessible entry into enforcement and administrative procedures for environmental health. The main legal procedures used in the environmental health field are presented as flow charts supported by explanatory text. The structure of this eighth edition has been revised for ease of use, with each chapter now addressing a single topic instead of a piece of legislation. It also introduces legal guidance for environmental health practitioners to prepare them for the court prosecutions that are an essential part of their work. The book has been updated throughout to reflect new practices, legislation and statutory guidance including: Primary Authorities Authorisations for public water supplies Infectious disease control Port Health RIDDOR Environmental permitting Environmental damage Imported food Empty homes Licensing of housing Licensing of gambling activities

**Environmental Health Officers/Practitioners and students will find this book invaluable. It will also be an essential reference for all those whose responsibilities demand they keep abreast of current environmental health practices.**

## Climate Change and Aviation Issues, Challenges and Solutions

*Routledge Trends* such as the massive growth in availability of air travel and air freight are among those which have led to aviation becoming one of the fastest growing emitters of greenhouse gases. These trends have also caused a shift in expectations of how we do business where we go on holiday and what food and goods we can buy. For these reasons aviation is (and is set to stay) high up on global political organizational and media agendas. This textbook is the first to attempt a comprehensive review of the topic bringing together an international team of leading scientists. Starting with the science.

## Cleaning Pakistan's Air Policy Options to Address the Cost of Outdoor Air Pollution

*World Bank Publications* The harm to Pakistanis' health, economy, and environment from urban air pollution is among the highest in South Asia, exceeding several high-profile causes of mortality and morbidity in Pakistan. This report details a broad spectrum of research on Pakistan's air quality management challenges and presents concrete steps to achieve improvements.

## Environmental Policy in the European Union Actors, Institutions, and Processes

*Earthscan* This second and fully revised edition brings together some of the most influential work on the theory and practice of contemporary EU environmental policy. Comprising five comprehensive parts, it includes in-depth case studies of contemporary policy issues such as climate change, genetically modified organisms and trans-Atlantic relations, as well as an

assessment of how well the EU is responding to new challenges such as enlargement, environmental policy integration and sustainability. The book's aim is to look forward and ask whether the EU is prepared or even able to respond to the 'new' governance challenges posed by the perceived need to use 'new' policy instruments and processes to 'mainstream' environmental thinking in all EU policy sectors.

## Plant Response to Air Pollution

*John Wiley & Sons Incorporated* **Air pollution poses a serious threat to human health and the environment worldwide. It contributes significantly to regional and global atmospheric issues such as global warming, acidification and depletion of the ozone layer. It affects every living thing, including all kinds of vegetation on which we depend for our survival. Although several works have appeared on air pollution, few, are able to provide the broad background that encompasses the whole gamut of plant responses to atmospheric insult. This multi-authored work integrates the varied plant growth responses to the pollution stress; the focus of the attention is plant rather than pollutant. This portrays a clearer picture of plant performance versus air pollution, and helps develop a better insight of the pollution-based disturbances at the different levels of plant life. The book shall interest both students and researchers of environmental botany and forestry as well as all those who love plants and have any interest towards global vegetation and environmental health.**

## The Inside Story

## A Guide to Indoor Air Quality

## Light Pollution

## Responses and Remedies

*Springer Science & Business Media* **Light-pollution is the modern scourge of optical astronomy. An increasing number of observing sites are in danger of being rendered useless due to the glare of city lighting blotting out the night sky. Professional astronomical observatories are located far from cities, but amateur astronomers often do not have this luxury. This book considers the two available strategies open to Astronomers. The first involves campaigning against light pollution by lobbying Authorities and Standards Organisations, and the second involves using the correct instrumentation. The book contains an extensive detailed catalogue of deep-sky and other objects that - despite what one might believe - can be seen from variously light-polluted sites, for practical observers.**

# Traffic-Related Air Pollution

*Elsevier* **Traffic-Related Air Pollution** synthesizes and maps TRAP and its impact on human health at the individual and population level. The book analyzes mitigating standards and regulations with a focus on cities. It provides the methods and tools for assessing and quantifying the associated road traffic emissions, air pollution, exposure and population-based health impacts, while also illuminating the mechanisms underlying health impacts through clinical and toxicological research. Real-world implications are set alongside policy options, emerging technologies and best practices. Finally, the book recommends ways to influence discourse and policy to better account for the health impacts of TRAP and its societal costs. Overviews existing and emerging tools to assess TRAP's public health impacts Examines TRAP's health effects at the population level Explores the latest technologies and policies--alongside their potential effectiveness and adverse consequences--for mitigating TRAP Guides on how methods and tools can leverage teaching, practice and policymaking to ameliorate TRAP and its effects

# Reckoning with the U.S. Role in Global Ocean Plastic Waste

An estimated 8 million metric tons (MMT) of plastic waste enters the world's ocean each year - the equivalent of dumping a garbage truck of plastic waste into the ocean every minute. Plastic waste is now found in almost every marine habitat, from the ocean surface to deep sea sediments to the ocean's vast mid-water region, as well as the Great Lakes. This report responds to a request in the bipartisan Save Our Seas 2.0 Act for a scientific synthesis of the role of the United States both in contributing to and responding to global ocean plastic waste. The United States is a major producer of plastics and in 2016, generated more plastic waste by weight and per capita than any other nation. Although the U.S. solid waste management system is advanced, it is not sufficient to deter leakage into the environment. **Reckoning with the U.S. Role in Global Ocean Plastic Waste** calls for a national strategy by the end of 2022 to reduce the nation's contribution to global ocean plastic waste at every step - from production to its entry into the environment - including by substantially reducing U.S. solid waste generation. This report also recommends a nationally-coordinated and expanded monitoring system to track plastic pollution in order to understand the scales and sources of U.S. plastic waste, set reduction and management priorities, and measure progress.

# Stuff You Should Know

## An Incomplete Compendium of Mostly Interesting Things

*Flatiron Books* From the duo behind the massively successful and award-winning podcast **Stuff You Should Know** comes an unexpected look at things you thought you knew. Josh Clark and Chuck Bryant started the podcast **Stuff You Should Know** back in 2008 because they were curious—curious about the world around them, curious about what they might have missed in their formal educations, and curious to dig deeper on stuff they thought they understood. As it turns out, they aren't the only curious ones. They've since amassed a rabid fan base, making **Stuff You Should Know** one of the most popular podcasts in the world. Armed with their inquisitive natures and a passion for sharing, they uncover the weird, fascinating, delightful, or unexpected elements of a wide variety of topics. The pair have now taken their near-boundless "whys" and "hows" from your earbuds to the pages of a book for the first time—featuring a completely new array of subjects that they've long wondered about and wanted to explore. Each chapter is further embellished with snappy visual material to allow for rabbit-hole tangents and digressions—including charts, illustrations, sidebars, and footnotes. Follow along as the two dig into the underlying stories of everything from the origin of Murphy beds, to the history of facial hair, to the psychology of being lost. Have you ever wondered about the world around you, and wished to see the magic in everyday things? Come get curious with **Stuff You Should Know**. With Josh and Chuck as your guide, there's something interesting about everything (...except maybe jackhammers).

## Guidelines for Community Noise

### Gaia

## A New Look at Life on Earth

Contains a new preface written for this revised impression in which the author answers criticism for his ideas and underlines the continuing implications of this theory for the future -- Back cover.

## State of Denial: Bush at War

*Simon and Schuster* In his unmissable new book Bob Woodward takes the reader on an inside journey from the start of the Iraq War in 2003 right up to the present day, providing a detailed, authoritative account of President Bush's leadership and the struggles among the men and women in the White House, the Pentagon, the CIA and the State Department. With Bush well into his second term, Woodward breaks new ground, as he has in his thirteen previous international bestsellers, including BUSH AT WAR and PLAN OF ATTACK. Woodward puts the Bush legacy in historical context as he shows this presidency in action in a way that is normally seen only years after a chief executive leaves office. He describes how Bush and his team have attempted to change the way that wars are fought, and put together a re-election campaign while re-inventing their strategy for the invasion and occupation of Iraq over and over again. Here is the behind-the-scenes story of this administration -- meetings, conversations, and memos; conflicts, manoeuvring, and anguish -- as key administration figures provide a full view of the first presidency of the twenty-first century.

## Livestock's Long Shadow

## Environmental Issues and Options

*Food & Agriculture Org.* "The assessment builds on the work of the Livestock, Environment and Development (LEAD) Initiative"--Pref.

## It's Decorative Gourd Season, Motherfuckers

*Chronicle Books* A passionate and profane love letter to fall, the best fucking season of the year. Do you get excited at the first brisk breeze of the year? Are you overcome with delight when you see piles of red leaves? Do you lose your fucking mind at a pumpkin patch? At last, the epically funny internet sensation It's Decorative Gourd Season, Motherfuckers is now a visual tour-de-force, teeming with a cornucopia of perfectly paired photos and seasonal enchantments to make it really fucking sing. Whiffy candles, wicker baskets, motherfucking gourd after gourd, and people going insane they love fall so much? Check! Also included: the equally lifechanging meditation It's Rotting Decorative Gourd Season, Motherfuckers, because all good things must end. Give it to everyone you love, or put it on your fucking coffee table next to a pile of shellacked vegetables to really tie the room together. Perfect for: For anyone who fucking loves fall, and fans of

McSweeney's, Go the Fuck to Sleep, Deep Thoughts, the Onion, and the New Yorker.

# The Oxford English Dictionary

Vol. 1-

## Biofiltration for Air Pollution Control

*CRC Press* **The number-one environmental threat to public health, air pollution remains a pressing problem-made even more complicated by the massive quantity and diversity of air pollution sources. Biofiltration technology (using micro-organisms growing on porous media) is being recognized as one of the most advantageous means to convert pollutants to harmless products. Done properly, biofiltration works at a reasonable cost-utilizing inexpensive components, without requiring fuel or generating hazardous by-products. Firmly established in Europe, biofiltration techniques are being increasingly applied in North America: Biofiltration for Air Pollution Control offers the necessary knowledge to "do it right."**

## World Malaria Report 2016

**The World Malaria Report 2016 summarizes information received from malaria-endemic countries and other sources and updates the analyses presented in the 2015 report. The World Malaria Report is WHO's flagship malaria publication released each year in December. It assesses global and regional malaria trends, highlights progress towards global targets, and describes opportunities and challenges in controlling and eliminating the disease. Most of the data presented in this report is for 2015.**

## Composition, Chemistry, and Climate of the Atmosphere

*Van Nostrand Reinhold Company* **Bringing together experts in air chemistry and pollution, this volume analyzes and integrates the scientific evidence behind the myriad of issues of air pollution. Tracing the history of air pollution, from localized microenvironments to regional and global levels, it provides insights into the mean physical and dynamic characteristics of the atmosphere, the effects of population and industry on atmospheric composition, and quantifiable resources of air pollution. It also includes extensive coverage of photochemical smog, tropospheric ozone, stratospheric ozone depletion, acid rain, and global warming.**

# The United Nations world water development report 2018

## nature-based solutions for water

*UNESCO Publishing*

# Air Pollution Control Technology Handbook

*CRC Press* In the debate over pollution control, the price of pollution is a key issue. But which is more costly: clean up or prevention? From regulations to technology selection to equipment design, *Air Pollution Control Technology Handbook* serves as a single source of information on commonly used air pollution control technology. It covers environmental regulations and their history, process design, the cost of air pollution control equipment, and methods of designing equipment for control of gaseous pollutants and particulate matter. This book covers how to: Review alternative design methods Select methods for control Evaluate the costs of control equipment Examine equipment proposals from vendors With its comprehensive coverage of air pollution control processes, the *Air Pollution Control Technology Handbook* is a detailed reference for the practicing engineer who prepares the basic process engineering and cost estimation required for the design of an air pollution control system. It discusses the topics in depth so that you can apply the methods and equations presented and proceed with equipment design.

## Polyvinyl Chloride Liquor Bottles

## Environmental Impact Statement

## A Planet to Win

## Why We Need a Green New Deal

*Verso Books* A bold case for a Green New Deal that confronts climate change and inequality—because all politics are climate politics in the twenty-first century The age of climate gradualism is over, as unprecedented disasters are exacerbated by inequalities of race and class. We need profound,

radical change. A Green New Deal can tackle the climate emergency and rampant inequality at the same time. Cutting carbon emissions while winning immediate gains for the many is the only way to build a movement strong enough to defeat big oil, big business, and the super-rich—starting right now. *A Planet to Win* explores the political potential and concrete first steps of a Green New Deal. It calls for dismantling the fossil fuel industry and building beautiful landscapes of renewable energy, guaranteeing climate-friendly work and no-carbon housing and free public transit. And it shows how a Green New Deal in the United States can strengthen climate justice movements worldwide. We don't make politics under conditions of our own choosing, and no one would choose this crisis. But crises also present opportunities. We stand on the brink of disaster—but also at the cusp of wondrous, transformative change.

## Asperger Syndrome, the Universe and Everything

*Jessica Kingsley Pub* **Kenneth Hall was diagnosed with Asperger's Syndrome at the age of eight. Here he describes some of the inner experiences and perceptions of autism in childhood. He has a warm and positive attitude which other children will find inspiring. Insights, struggles and joys are recounted vividly in a frank and humorous way.**

## National Strategy for the Development of Regional Nutrient Criteria

## Doughnut Economics

## Seven Ways to Think Like a 21st-Century Economist

*Chelsea Green Publishing* **A Financial Times "Best Book of 2017: Economics" 800-CEO-Read "Best Business Book of 2017: Current Events & Public Affairs" Economics is the mother tongue of public policy. It dominates our decision-making for the future, guides multi-billion-dollar investments, and shapes our responses to climate change, inequality, and other environmental and social challenges that define our times. Pity then, or more like disaster, that its fundamental ideas are centuries out of date yet**

are still taught in college courses worldwide and still used to address critical issues in government and business alike. That's why it is time, says renegade economist Kate Raworth, to revise our economic thinking for the 21st century. In *Doughnut Economics*, she sets out seven key ways to fundamentally reframe our understanding of what economics is and does. Along the way, she points out how we can break our addiction to growth; redesign money, finance, and business to be in service to people; and create economies that are regenerative and distributive by design. Named after the now-iconic "doughnut" image that Raworth first drew to depict a sweet spot of human prosperity (an image that appealed to the Occupy Movement, the United Nations, eco-activists, and business leaders alike), *Doughnut Economics* offers a radically new compass for guiding global development, government policy, and corporate strategy, and sets new standards for what economic success looks like. Raworth handpicks the best emergent ideas—from ecological, behavioral, feminist, and institutional economics to complexity thinking and Earth-systems science—to address this question: How can we turn economies that need to grow, whether or not they make us thrive, into economies that make us thrive, whether or not they grow? Simple, playful, and eloquent, *Doughnut Economics* offers game-changing analysis and inspiration for a new generation of economic thinkers.

## America's Climate Choices

*National Academies Press* Climate change is occurring. It is very likely caused by the emission of greenhouse gases from human activities, and poses significant risks for a range of human and natural systems. And these emissions continue to increase, which will result in further change and greater risks. *America's Climate Choices* makes the case that the environmental, economic, and humanitarian risks posed by climate change indicate a pressing need for substantial action now to limit the magnitude of climate change and to prepare for adapting to its impacts. Although there is some uncertainty about future risk, acting now will reduce the risks posed by climate change and the pressure to make larger, more rapid, and potentially more expensive reductions later. Most actions taken to reduce vulnerability to climate change impacts are common sense investments that will offer protection against natural climate variations and extreme events. In addition, crucial investment decisions made now about equipment and infrastructure can "lock in" commitments to greenhouse gas emissions for decades to come. Finally, while it may be possible to scale back or reverse many responses to climate change, it is difficult or impossible to "undo" climate change, once manifested. Current efforts of local, state, and private-sector actors are important, but not likely to yield progress comparable to what could be achieved with the addition of strong federal policies that establish coherent national goals and incentives, and that promote strong U.S. engagement in international-

level response efforts. The inherent complexities and uncertainties of climate change are best met by applying an iterative risk management framework and making efforts to significantly reduce greenhouse gas emissions; prepare for adapting to impacts; invest in scientific research, technology development, and information systems; and facilitate engagement between scientific and technical experts and the many types of stakeholders making America's climate choices.

## Outdoor Air Pollution

# IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

This volume of the IARC Monographs series provides an evaluation of the carcinogenicity of outdoor air pollution. Outdoor air pollution is a complex mixture of pollutants originating from natural and anthropogenic sources, including transportation, power generation, industrial activity, biomass burning, and domestic heating and cooking. The mix of pollutants in outdoor air varies widely in space and time, reflecting the diversity of sources and the influence of atmospheric processes. Commonly measured air pollutants include particulate matter (PM<sub>2.5</sub>, PM<sub>10</sub>), nitrogen dioxide, and sulfur dioxide; the concentration of particulate matter is often used as an indicator of pollution levels. Millions of people worldwide are exposed to outdoor air pollution at levels that substantially exceed existing health-based guidelines. This evaluation is the culmination of a series that has examined individual pollutants that are contained in the mixture of outdoor air. Related previous evaluations have been published in IARC Monographs Volumes 92, 93, 95, 100C, 100E, 103, and 105. An IARC Monographs Working Group reviewed epidemiological studies, animal cancer bioassays, and mechanistic data to assess the carcinogenic hazards of exposure to outdoor air pollution and particulate air pollution.

## Sustainable Cities and Communities

*Springer* The problems related to the process of industrialisation such as biodiversity depletion, climate change and a worsening of health and living conditions, especially but not only in developing countries, intensify. Therefore, there is an increasing need to search for integrated solutions to make development more sustainable. The United Nations has acknowledged the problem and approved the “2030 Agenda for Sustainable Development”. On 1st January 2016, the 17 Sustainable Development Goals (SDGs) of the Agenda officially came into force. These goals cover the three dimensions of sustainable development: economic growth, social inclusion and environmental protection. The Encyclopedia of

the UN Sustainable Development Goals comprehensively addresses the SDGs in an integrated way. The Encyclopedia encompasses 17 volumes, each one devoted to one of the 17 SDGs. This volume addresses SDG 11, namely "Make cities and human settlements inclusive, safe, resilient and sustainable" and contains the description of a range of terms, which allows a better understanding and fosters knowledge. This book presents a set of papers on the state of the art of knowledge and practices about the numerous challenges for cities, solutions and opportunities for the future. Concretely, the defined targets are: Ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums Provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons Enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries Strengthen efforts to protect and safeguard the world's cultural and natural heritage Significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations Reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management Provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning Substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials Editorial Board Samuel Borges Barbosa, Luciana Londero Brandli, Elisa Conticelli, Erin A. Hopkins, Olga Kuznetsova, Astrid Skjerven, Hari Srinivas

## Emerging Trends in Environmental Biotechnology

*CRC Press* The environment is an all-encompassing component of the ecosystem of "Blue planet - the earth", made up of the hydrosphere, atmosphere and lithosphere. These three spheres have biotic and abiotic

components which exhibit ecological homeostasis that provides the most appropriate survival chances for the members of biotic component and geochemical balance with abiotic components. This ecosystem is subjected to relatively harsh conditions, mostly created by the disastrous activities due to natural calamities and intentional and/or accidental anthropogenic activities. Biotechnology has become a potential tool to dissipate such environmental impacts because of the advancement it has undergone recently. *Emerging Trends in Environmental Biotechnology* is an outstanding collection of current research that integrates basic and advanced concepts of biotechnology such as genomics, proteomics, bioinformatics, sequencing, and imaging processes to improvise and protect the environment. This book is particularly attractive for scientists, researchers, students, educators and professionals in environmental science, agriculture, veterinary and biotechnology science. The book will enable them to solve the problems about sustainable development with the help of current innovative biotechnologies such as recombinant DNA technology and genetic engineering which have tremendous potential for impacting global food security, environmental health, human and animal health and overall livelihood of mankind. Features Presents easy-to-read chapters Information is presented in a very accessible and logical format Identifies and explores biotechnological approaches for environmental protection Encompasses biodegradation of hazardous contaminants, biotechnology in waste management, nanotechnology, and issues in environmental biotechnology research

## Plug-In Electric Vehicles

### What Role for Washington?

*Brookings Institution Press* **Plug-in electric vehicles are coming. Major automakers plan to commercialize their first models soon, while Israel and Denmark have ambitious plans to electrify large portions of their vehicle fleets. No technology has greater potential to end the United States' crippling dependence on oil, which leaves the nation vulnerable to price shocks, supply disruptions, environmental degradation, and national security threats including terrorism. What does the future hold for this critical technology, and what should the U.S. government do to promote it? Hybrid vehicles now number more than one million on America's roads, and they are in high demand from consumers. The next major technological step is the plug-in electric vehicle. It combines an internal combustion engine and electric motor, just as hybrids do. But unlike their precursors, PEVs can be recharged from standard electric outlets, meaning the vehicles would no longer be dependent on oil. Widespread growth in the use of PEVs would dramatically reduce oil dependence, cut driving costs and reduce pollution from vehicles. National security would be enhanced,**

as reduced oil dependence decreases the leverage and resources of petroleum exporters. Brookings fellow David Sandalow heads up an authoritative team of experts including former government officials, private-sector analysts, academic experts, and nongovernmental advocates. Together they explain the current landscape for PEVs: the technology, the economics, and the implications for national security and the environment. They examine how the national interest could be served by federal promotion and investment in PEVs. For example, can tax or procurement policy advance the cause of PEVs? Should the public sector contribute to greater research and development? Should the government insist on PEVs to replenish its huge fleet of official vehicles? Plug-in electric vehicles are coming. But how soon, in what numbers, and to what effect? Federal policies in the years ahead will go a long way toward answering those questions. David Sandalow and his colleagues examine what could be done in that regard, as well as what should be done.

## Effluents from Pulp Mills Using Bleaching

"There were 47 pulp mills employing chlorine bleaching in operation in Canada at the time of writing this risk assessment report. The molecular chlorine or chlorine-containing compounds currently used as bleaching agents by the pulp and paper sector react with materials released from wood during the pulping process, resulting in the formation of chlorinated organic compounds which are in part discharged into the aquatic environment via effluents"--Summary, p. viii.