

Green Alternatives And National Energy Strategy The Facts Behind The Headlines

It is no secret that the United States' dependence on oil -- mostly foreign -- puts the country in a precarious position. The United States needs innovative ways not only to power millions of automobiles on its highways but also to secure sustainable sources of fuel for the future. This book presents the latest facts and figures about alternative energy to any physicist, engineer, policymaker, or concerned citizen who needs a reliable source of information on the nation's looming energy crisis. Philip G. Gallman focuses especially on green vehicles and the interrelationship between their design and various energy sources. He explains simply and clearly the complex energy and automotive engineering issues involved in developing green vehicles, measures their likely effect on energy resource demand, and considers what they might mean for national energy strategy. Addressing problems associated with renewable resources often overlooked or ignored in the popular press, Gallman explains what replacing oil with alternative sources of energy realistically entails. Can the nation satisfy its energy demands with wind turbines, solar power, hydroelectric power, or geothermal power? Is biodiesel or electricity the answer to our gas-guzzling ways? Organized logically and with an accessible narrative, *Green Alternatives and National Energy Strategy* guides readers through the essential questions and hurdles the United States must answer and overcome to transition from a petroleum-dependent nation to one that runs on sustainable, renewable energy.

Describes the potential environmental impacts of the Proposed Final 2012-2017 Outer Continental Shelf (OCS) Oil and Gas Leasing Program (PFP), which establishes a schedule that is used as a basis for considering where and when oil and gas leasing might be appropriate over a 5-year period.

The United States and China are the world's top two energy consumers and, as of 2010, the two largest economies. Consequently, they have a decisive role to play in the world's clean energy future. Both countries are also motivated by related goals, namely diversified energy portfolios, job creation, energy security, and pollution reduction, making renewable energy development an important strategy with wide-ranging implications. Given the size of their energy markets, any substantial progress the two countries make in advancing use of renewable energy will provide global benefits, in terms of enhanced technological understanding, reduced costs through expanded deployment, and reduced greenhouse gas (GHG) emissions relative to conventional generation from fossil fuels. Within this context, the U.S. National Academies, in collaboration with the Chinese Academy of Sciences (CAS) and Chinese Academy of Engineering (CAE), reviewed renewable energy development and deployment in the two countries, to highlight prospects for collaboration across the research to deployment chain and to suggest strategies which would promote more rapid and economical attainment of renewable energy goals. Main findings and concerning renewable resource assessments, technology development, environmental impacts, market infrastructure, among others, are presented. Specific recommendations have been limited to those judged to be most likely to accelerate the pace of deployment, increase cost-competitiveness, or shape the future market for renewable energy. The recommendations presented here are also pragmatic and achievable.

There are rapid, and sometimes radical, changes now transforming energy production and consumption in the United States. Utilizing contemporary examples throughout his narrative, Walter A. Rosenbaum captures this transformation in *American Energy: The Politics of 21st Century Policy* while analyzing how important actors, institutions, and issues impact American energy policymaking. With clear explanations of relevant energy technologies—from controversial fracking to mountain top mining to nuclear waste storage—the book first looks at the policy options available in governing the energy economy and then discusses specific resources (petroleum and natural gas, coal, nuclear power, electricity, renewable energy, conservation) and the global energy challenges associated with climate change. This is a perfect supplement for any environmental politics course.

Green Alternatives and National Energy Strategy The Facts behind the Headlines JHU Press

The must-read summary of Robert Bryce's book: "Power Hungry: The Myths of "Green" Energy and the Real Fuels of the Future". This complete summary of "Power Hungry" by Robert Bryce, a prominent American journalist, presents his argument that green energy in the US is a myth, as renewables are not in fact particularly green, and carbon capture and sequestration is unlikely to ever work. He states that the only feasible and workable energy strategy for the US would have to be built on harnessing natural gas and nuclear power to generate electricity, which he believes are the real fuels of the future. Added-value of this summary: • Save time • Understand the energy sector in America and globally • Expand your knowledge of American politics and culture To learn more, read "Power Hungry" and discover how the renewable energy sector may not be as promising as it seems, and what some realistic alternatives may be. Hydrogen and fuel cells are vital technologies to ensure a secure and CO2-free energy future. Their development will take decades of extensive public and private effort to achieve technology breakthroughs and commercial maturity. Government research programmes are indispensable for catalysing the development process. This report maps the IEA countries current efforts to research, develop and deploy the interlocking elements that constitute a hydrogen economy, including CO2 capture and storage when hydrogen is produced out of fossil fuels. It provides an overview of what is being done, and by whom, covering an extensive complexity of national government R&D programmes. The survey highlights the potential for exploiting the benefits of the international co-operation. This book draws primarily upon information contributed by IEA governments. In virtually all the IEA countries, important R&D and policy efforts on hydrogen and fuel cells are in place and expanding. Some are fully-integrated, government-funded programs, some are a key element in an overall strategy spread among multiple public and private efforts. The large amount of information provided in this publication reflects the vast array of technologies and logistics required to build the hydrogen economy.

In *Powering the Future*, Nobel laureate Robert B. Laughlin transports us two centuries into the future, when we've ceased to use carbon from the ground -- either because humans have banned carbon burning or because fuel has simply run out. Boldly, Laughlin predicts no earth-shattering transformations will have taken place. Six generations from now, there will still be soccer moms, shopping malls, and business trips. Firesides will still be snug and warm. How will we do it? Not by discovering a magic bullet to slay our energy problems, but through a slew of fascinating technologies, drawing on wind, water, and fire. *Powering the Future* is an objective yet optimistic tour through alternative fuel sources, set in a world where we've burned every last drop of petroleum and every last shovelful of coal. The Predictable: Fossil fuels will run out. The present flow of crude oil out of the ground equals in one day the average flow of the Mississippi River past New Orleans in thirteen minutes. If you add the energy equivalents of gas and coal, it's thirty-six minutes. At the present rate of consumption, we'll be out of fossil fuels in two

centuries" time. We always choose the cheapest gas. From the nineteenth-century consolidation of the oil business to the California energy crisis of 2000-2001, the energy business has shown, time and again, how low prices dominate market share. Market forces -- not green technology -- will be the driver of energy innovation in the next 200 years. The laws of physics remain fixed. Energy will still be conserved, degrade entropically with use, and have to be disposed of as waste heat into outer space. How much energy a fuel can pack away in a given space is fixed by quantum mechanics -- and if we want to keep flying jet planes, we will need carbon-based fuels. The Potential: Animal waste. If dried and burned, the world's agricultural manure would supply about one-third as much energy as all the coal we presently consume. Trash. The United States disposes of 88 million tons of carbon in its trash per year. While the incineration of waste trash is not enough to contribute meaningfully to the global demand for energy, it will constrain fuel prices by providing a cheap supply of carbon. Solar energy. The power used to light all the cities around the world is only one-millionth of the total power of sunlight pouring down on earth's daytime side. And the amount of hydropump storage required to store the world's daily electrical surge is equal to only eight times the volume of Lake Mead.

Natural resource and environmental conflicts have long been issues confronting human societies. This case-based examination of a wide range of natural resource disputes exposes readers to many contemporary examples that offer reasons for both hope and concern. • Provides a "case-based" approach to natural resource conflicts with examples of different scales, including timely cases drawn from the developed and developing world • Enables readers to reach a broader understanding of the scope of the issues through the variety of topics and cases—one of which is climate change in many of the emerging conflicts • Presents balanced information regarding each case argued from multiple viewpoints and perspectives, allowing the reader to gain a more balanced and comprehensive sense of the topics

A Simon & Schuster eBook. Simon & Schuster has a great book for every reader.

A component in the America's Energy Future study, Electricity from Renewable Resources examines the technical potential for electric power generation with alternative sources such as wind, solar-photovoltaic, geothermal, solar-thermal, hydroelectric, and other renewable sources. The book focuses on those renewable sources that show the most promise for initial commercial deployment within 10 years and will lead to a substantial impact on the U.S. energy system. A quantitative characterization of technologies, this book lays out expectations of costs, performance, and impacts, as well as barriers and research and development needs. In addition to a principal focus on renewable energy technologies for power generation, the book addresses the challenges of incorporating such technologies into the power grid, as well as potential improvements in the national electricity grid that could enable better and more extensive utilization of wind, solar-thermal, solar photovoltaics, and other renewable technologies.

Addressing the major issues associated with green energy and energy efficiency, this book examines the economics of energy from the theoretical as well as applied perspectives. It makes a valuable contribution to existing discussion around environment and climate change issues, and provides an analysis of the socioeconomic and policy-oriented aspects of this topic. Each chapter is self-contained and tackles the fundamental issues and latest developments of a particular sub-topic. Combining rigour and accessibility, this book allows non-specialized readers to understand the complexity of the topic, and to likewise access the most relevant and up-to-date literature. It simultaneously enables more specialized readers to broaden their understanding of complex energy topics and it provides a comprehensive overview of the cutting-edge developments of the issues covered by the book. This book covers important themes including regulation for green energy, the promotion of green energy and efficiency, the challenges and options of renewable energy, and efficiency in economic sectors. It is intended for researchers and postgraduates with an interest in energy, climate change and environmental economics, and also policymakers and energy companies.

Clean energy innovation is central to the fight against climate change. To rise to this challenge, the United States should launch a National Energy Innovation Mission. Led by the president and authorized by Congress, this mission should harness the nation's unmatched innovative capabilities—at research universities, federal laboratories, and private firms (both large and small), in all regions of the country—to speed the progress of clean energy technologies. To jumpstart this mission and unlock a virtuous cycle of public and private investment, the US federal government should triple its funding for energy research, development, and demonstration (RD&D) over the next five years to \$25 billion by 2025. "Energizing America" offers policymakers a strategic framework to build a growing RD&D portfolio over the next five years, detailed funding proposals across the full spectrum of critical energy technologies, and recommendations for immediate action.

Doctoral Thesis / Dissertation from the year 2020 in the subject Business economics - Industrial Management, grade: 88.8, , course: Doctoral Degree Program, language: English, abstract: A sustainable energy regime, especially for developing countries such as Ivory Coast, is a wise choice. It can mobilize renewable energy resources, modernize energy system, allow for energy savings, safeguard the equilibrium of local ecosystems, contribute to poverty alleviation and, therefore, constitutes a significant aid towards universal access to modern energy services. This current research investigates the conditions needed to achieve a sustainable energy regime by the next decade (2030) in Ivory Coast, West Africa. To identify these conditions, first, a forecast model using a hybrid method, support vector regression (SVR) and an autoregressive integrated moving average (ARIMA) was employed to predict energy consumption by 2030. Second, a back-casting approach to assessing alternative energy scenarios was carried out. Third, a national energy action plan (NEAP) was designed with the help of a multi-criteria decision analysis (MCDA) and a technique known as the fuzzy analytic hierarchy process (AHP). The results show that, by 2030, conventional fuels should be dominant in the transport and industrial sectors, while traditional forms of energy should prevail over others in the residential one. Besides, the green scenario that accumulates universal energy access, energy efficiency, and renewable energies dissemination targets are the most sustainable. Moreover, social criterion and solar energy were found the most critical factor and the most preferred renewable energy, respectively, when considering a sustainable energy path. Based on those findings, it was recognized that a definite shift in energy policy maximizing the use of clean types of energy was required to reach a sustainable energy regime. In this perspective, policy recommendations, in addition to the national energy action plan, were provided to guide the Ivorian decision-makers.

Renewable and carbon-neutral energy have been promoted as the future of energy production in the United States. Non-traditional energy sources show promise as alternatives to fossil fuels and may provide a sustainable source of energy in increasingly uncertain energy markets. However, these new sources of energy face their own set of political, administrative, and legal

challenges. Green vs. Green explores how mixed land ownership and existing law and regulation present serious challenges to the development of alternative energy sources in the United States. Analytically examining and comparing five green energy sectors; wind, solar, geothermal, biofuel and hydro power, Ryan M. Yonk, Randy T. Simmons, and Brian C. Steed argue that discussing alternative energy without understanding these pitfalls creates unrealistic expectations regarding the ability to substitute "green" energy for traditional sources. The micro-goals of protecting individual areas, species, small-scale ecosystems, and other local environmental aims often limits ability to achieve macro-goals like preventing global climate change or transitioning to large-scale green energy production. Statutes and regulations designed to protect environmental and cultural integrity from degradation directly conflict with other stated environmental ends. Although there is substantial interest in adding clean energy to the grid, it appears that localized environmental interests interfere with broader environmental policy goals and the application of existing environmental laws and regulations may push us closer to gridlock. Green vs. Green provides a fascinating look into how existing environmental law created or will create substantial regulatory hurdles for future energy generations.

Three Facets of Public Health and Paths to Improvements provides an overview on how specific indicators like the environment, culture and behavior play a role in developing improved outcomes for public health in local, regional, national and global health policy and concerns. Divided into three sections, the book examines the impact of the environment and social determinants on public health. It also illustrates the interrelation of these facets as predictors of public health, explores their institutional, organizational and individual impacts, and considers the way multiple stakeholders must engage to improve conditions that impact health. The book utilizes various research methods, including fundamental, systematics, qualitative and quantitative. Readers can use the information to inform future research and better understand an existing health problem and outcomes. Offers a multisectoral (MSA) approach to understanding environmental, behavioral and social facets of public health Includes an expert analysis (e.g., qualitative, quantitative) approach in relation to policy and existing problems Combines an analytic approach with educational presentation to engage diverse readership

"The Final EIS differs from the Draft because of adjustments in the baseline (or No Action Alternative) and changes to some of the assumptions and data used for the original analysis. These changes are: 1) a decrease of the projected coal production from the study region without new Federal coal leasing; 2) earlier anticipated dates for construction and mining for the proposed coal lease tracts; 3) refinement of the coal reserves and projected production from the coal lease tracts"--Page 9, volume 1.

Climate change mitigation is still possible, if innovative economic policies are implemented, such as those provided by this book: a large array of proposals by 30 economists from developing and developed countries. High and senior level policymakers (and their staff) will find fundamental outlines and insights for negotiating and laying down NAMAs (Nationally Appropriate Mitigation Actions) and Climate Action Plans at national, sub-national, city and sectoral levels. With more than 20 "recipes", this book is revolutionary because: 1. it leads the reader from the context to the implementation details; 2. it reverses classical textbook proportions of "90%% analysis and 10%% proposals" in favor of "90%% proposals and 10%% analysis"; 3. it relates each policy to a number of co-benefits to synergize climate mitigation with employment, competitiveness, and happiness. This second edition 2012 builds upon the experience gained in implementation worldwide.

This new resource is a practical overview of designing, testing and troubleshooting power electronics in alternative energy systems, providing you with the most important information on how power electronics components such as inverters, controllers and batteries can play a pivotal role in the successful implementation of green energy solutions for both stand-alone and grid-connected applications. You will learn how to choose the right components for diverse systems, from utility-scale wind farms to photovoltaic panels on single residences, how to get the most out of existing systems, and how to solve the tough challenges particular to alternative energy applications. Whether you are a renewables professional who needs to understand more about how power electronics impact energy output, or a power engineer who is interested in learning what new avenues the alternative energy revolution is opening for your work, start here with advice and explanations from the experts, including equations, diagrams and tables designed to help you understand and succeed. Provides a thorough overview of the key technologies, methods and challenges for implementing power electronics in alternative energy systems for optimal power generation Includes hard-to-find information on how to apply converters, inverters, batteries, controllers and more for stand-alone and grid-connected systems Covers wind and solar applications, as well as ocean and geothermal energy, hybrid systems and fuel cells

The second edition of Alternative Energy: Political, Economic, and Social Feasibility builds on first edition material, but with significant updates on dramatic changes within the renewable energy sector over the last decade. The book discusses the basic technical aspects of major renewable energy systems and technological developments; the impact of politics on energy policy using contemporary theories of public policy (such as, Advocacy Coalition Framework (ACF), Punctuated Equilibrium (PE), Narrative Policy Framework, and Policy Diffusion), as well as discussing the evolution of the social feasibility of renewable energy. Alternative energy solutions, such as nuclear power, are expanded to discuss nuclear power developments and feasibility in the post-Fukushima policy environment. International commitment to renewable energy is also addressed. How can society quickly convert to renewable energy? Can worldwide energy needs ever be met through 100% renewable sources? The answers to these questions rest largely on the perception of choice in the energy arena. It is of pivotal importance that engineers, researchers and policymakers understand what choices are available, and reasonable, when considering the design and deployment of new energy systems. The mission of this new book, written by one of the world's foremost experts in renewable power, is to arm these professionals with the tools and methodologies necessary to make smart choices when implementing renewable energy systems. Provides an introduction to the technical design of renewable energy systems Demonstrates effective methodologies for analyzing the feasibility and efficiency of large-scale renewable energy systems to help

implementers avoid costly trial and error Contextualizes renewable energy design efforts by addressing the socio-political challenge of implementing the shift to renewables Free companion analysis software empowers energy professionals to crunch data for their own projects Features a dozen extensive case studies from around the globe that provide successful real-world templates for new installations

Can the nation satisfy its energy demands with wind turbines, solar power, hydroelectric power, or geothermal power? Is biodiesel or electricity the answer to our gas-guzzling ways? Organized logically and with an accessible narrative, Green Alternatives and National Energy Strategy guides readers through the essential questions and hurdles the United States must answer and overcome to transition from a petroleum-dependent nation to one that runs on sustainable, renewable energy.

A New York Democratic senator shares his plan for recapturing middle-class voters and restoring the Democratic Party's majority, addressing issues of concern to middle-class families, including college funding, property taxes, and homeland security.

[Copyright: a9709b155a8250073c358b876f0bda8b](https://www.amazon.com/dp/B000APR000)