

## Dubai Clean Energy Strategy 2050 On Track

*This study presents options to fully unlock the world’s vast solar PV potential over the period until 2050. It builds on IRENA’s global roadmap to scale up renewables and meet climate goals. This book covers critical debates on policies, markets and emerging issues that shape renewable energy transition in the Asian region, which is fast becoming an epicenter of the global energy consumption. The chapters focus on domestic policies, geopolitics, technology landscape and governance structure pertaining to the development of renewable energy in different Asian countries ranging from China to the Middle East. The book presents an insightful view of the pace and magnitude of the energy transition. It presents critical steps countries are taking to promote affordable and clean energy (SDG 7) as well as strengthening climate mitigation actions (SDG 13). In addition, this book introduces the concept of co-innovation--a collaborative and iterative approach to jointly innovate, manufacture and scale up low-carbon technologies--and its role in promoting energy transition in Asia. Chapter 8 (Renewable energy deployment to stimulate energy transition in the Gulf Cooperation Council) is available open access under a Creative Commons Attribution 4.0 International License via [link.springer.com](#).*

*Dubai has continued to meet its targets in becoming the global capital of Islamic finance, nearly doubling the number of sukuk (Islamic bonds) listings on its exchanges since 2017. Furthermore, eased policy restrictions to encourage foreign investment and the 2019 budget’s continued commitment to infrastructure development ahead of Expo 2020 are expected to continue driving economic activity. As one of the most diversified economies in the region, Dubai continues to present growth opportunities in various sectors including tourism, logistics, manufacturing and education. Although the emirate has benefited from its proximity to oil and gas fields, Dubai is right at the forefront of the emerging cleaner energy world, and developing and promoting renewable technologies, including solar energy and electric vehicles.*

*A unique approach to managing projects combining the principles of sustainable management theory with the currently established project management theory, in an applied context. Written by a team of international experts, it tackles issues such as digital transformation, smart cities, green project management, CSR and more.*

*Public Policy Perspectives*

*The race against time for smarter development*

*Case Studies and Practical Solutions*

*With Special Focus on Photovoltaic Systems*

*UAE*

*The Palgrave Handbook of Sustainability*

*To assess urban sustainability performance, this book explores several clusters of cities, including megacities, cities of the Global South, European and North American cities, cities of the Middle East and North Africa, a city state of Singapore and a large group of global cities. It applies a multi-criteria approach using a panel of environmental, economic, social and smart indicators to assess progress and policies in global cities including London, New York, Hong Kong, San Francisco, Los Angeles, São Paulo, Rio de Janeiro, Buenos Aires, Paris, Berlin, Stockholm, Moscow, Beijing, Seoul, Singapore, Shanghai, Sydney, Tokyo and many others. Additional attention is given to the issues of climate change, poverty and smart dimensions, with renewable energy and the drivers of urban CO2 emissions playing the central role. This book is abundant with case studies considering strategies, policies and performance of the leading cities, including San Francisco, Stockholm and Seoul in greater depth, exploring how their successes can be used by other cities. The book identifies key linkages between different smart and sustainability dimensions as well as investment opportunities in cities with sustainability potential. This book will be of great interest to policy makers, city and regional authorities as well as scholars and students of urban planning and sustainable development aiming to facilitate a sustainability transition in our cities around the world.*

*This book is a conscious effort to discuss the immeasurable environmental damage caused by the human kind and it is by turning these into nature friendly or green as we call them, we can continue to live without any damage to our surroundings. The book has a global approach with an eye on our domestic issues as well. Note: T&F does not sell or distribute the Handbook in India, Pakistan, Nepal, Bhutan, Bangladesh and Sri Lanka.*

*This book gathers high-quality research papers presented at the 2nd AUE international research conference, AUEIRC 2018, which was organized by the American University in the Emirates, Dubai, and held on November 13th-15th, 2018. The book is broadly divided into two main sections: Sustainability and Smart Business, and Sustainability and Creative Industries. The broad range of topics covered under these sections includes: risk assessment in agriculture, corporate social responsibility and the role of intermediaries, the impact of privatizing health insurance, political events and their effect on foreign currency exchange, the effect of sustainable HR practices on financial performance, sustainability integration in the supply chain and logistics, gender inequality in the MENA economies, the panel data model, the model of sustainable marketing in the era of Industry 4.0, micro-enterprises as a tool for combating unemployment, the impact of financial education and control on financial behavior, measuring financial and asset performance in agricultural firms, a comprehensive strategic approach to sustainability in the UAE, sustainability and project finance, HR analytics, FaD or fashion for organizational sustainability, a conceptual framework of sustainable competitive advantages, psychology of organizational sustainability, Blockchain technology and sustainability, veganism and sustainability, institution building from an emotional intelligence perspective, sustainable concrete production using CWP, occupants’ behavior and energy usage in Emirati houses, the effect of shop lighting on consumer behavior, multimedia applications in digital transformation art, integrating biomimicry principles in sustainable architecture, experimental sustainable practices in fashion education, technology-assisted student-centered learning for civil engineering, and a 10-step design process for architectural design studios. All contributions present high-quality original research work, findings and lessons learned in practical development.*

*This report explores the prospects for renewables to diversify national economies and the combined GCC energy mix, while helping the region meet climate goals and contribute to the 2030 Agenda for Sustainable Development.*

*Persian Gulf 2020*

*The Economics and Policy of Concentrating Solar Power Generation*

*Il Fenomeno Dubai. Dove l'impossibile diventa possibile*

*Strategies for growth*

*The Sun Is Rising in Africa and the Middle East*

*Modelling, Simulation and Intelligent Computing*

*Public policy is a set of principles used to uphold the well-being of citizens. These principles are often unwritten and form the basis of social laws. This book focuses on 'unlocking the black box of UAE Public Policy'. It presents several cases that give an insight into the UAE leadership, the areas the government has prioritized and how these fold into UAE Vision 2021. Viewpoints on provoking topics by thought leaders like Her Excellency Sheikha Lubna bint Khalid Al Qasimi, UAE Cabinet Member and UAE Minister of State for Tolerance; Fadi Ghandour, Co-Founder and Vice Chairman of Aramex and Managing Partner, Wamda Capital and Christopher M. Schroeder, Venture Investor and Author. Under the leadership of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Prime Minister and Vice President of UAE and Ruler of Dubai, Dubai has grown from a tiny village by a creek to a globally recognized megapolis. Through these cases, you will get a glimpse of strategic decisions taken by His Highness Sheikh Mohammed and how these decisions taken by the UAE Government have led to the creation of one of the most connected cities and competitive countries in the world. The book is divided into six sections: Government leadership, national competitive advantage, social and sustainable development, national human capital development, entrepreneurship and government systems. The UAE 2021 Vision aims for UAE to be one of the top 10 countries in the world. The future focus for UAE is to increase competitiveness in foreign markets especially looking at trade, entrepreneurship and focusing on seven high-value adding innovation sectors like renewable energy, transport, education, health, technology, water, and space. One of the challenges this resource-rich country has had is moving away from oil dependency. By 2016, oil formed less than 30% of the UAE GDP, and the plan is to have a 20% dependency by 2021. The book covers a variety of cases that address many of these issues. This book can be used to teach public policy and help international industry leaders and academics understand the context of UAE and the role it plays in the global arena. This project is a series by the Academy of International Business - MENA chapter, supported by the Mohammed Bin Rashid School of Government, Dubai. For more information on AIB- MENA, go to: <http://www.uowdubai.ac.ae/aib>*

*This book provides an up-to-date analysis of state-of-the-art concentrating solar power (CSP) generation. It focuses on the economic analysis of CSP generation technologies as well as the policies that have been and are being used around the globe to support it. The book describes the industrial sectors whose products make up the solar field, including the traditional manufacturers of turbines and generators. The authors provide the main theoretical tools needed to comprehend the costs of CSP technologies compared to other competing technologies (both conventional and renewable) and discuss the conceptual rationale behind creating public support for these technologies and the costs of various promotional techniques. Further, the book examines the concepts from different disciplinary traditions in economics (including environmental, innovation, industrial and public), which are then combined and integrated for an analysis of the costs and policies of CSP electricity. Addressing the main findings and the challenges for future CSP, the book is a valuable resource for researchers and practitioners. It is also of use to industrial engineers, as it identifies the features of the sector’s supply chain value, rooted in and supported by an industrial economics approach.*

*The Persian Gulf 2020 is the eighth in the annual Persian Gulf series published by MEI@ND. It is a comprehensive analysis of India’s bilateral relations with the nine countries in the Persian Gulf and the GCC and focuses on developments in 2019. It gives a comprehensive account of the current political, economic and security situation in the Persian Gulf countries and the Middle East and the region. The book also offers policy recommendations based on the current state of affairs.*

*The Routledge Handbook of Energy Law provides a definitive global survey of the discipline of Energy Law, capturing the essential and relevant issues in Energy today. Each chapter is written by a leading expert, and provides a contemporary overview of a significant area within the field. The book is divided into six geographical regions based on continents, with a separate section on Russia, an energy powerhouse that straddles both Europe and Asia. Each section contains highly topical chapters, from authors who address a number of core themes in Energy Law and Regulation: • Energy security and the role of markets • Regulating the growth of renewable energy • Regulating shifts in traditional forms of energy • Instruments in regulating disputes in energy • Impact of energy on the environment • Key issues in the future of energy and regulation.*

*Offering an analysis of the full spectrum of current issues in Energy Law, the Routledge Handbook of Energy Law is an essential resource for advanced students, researchers, academics, legal practitioners and industry experts.*

*Sun Towards High Noon*

*The Dubai Phenomenon - The impossible becomes possible*

*Solar Power Transforming Our Energy Future*

*Low Carbon Energy in the Middle East and North Africa*

*Smart Environment for Smart Cities*

*India’s Relations with the Region*

*Knowing the place you are about to visit it is even more important when those places are Dubai and the United Arab Emirates. Dubai is a dynamic reality that grows at impressive rates, an intriguing city, full of charm and full of amazing surprises. A City born only a few decades ago from the desert that has earned a place in the spotlight as The City of Records. A metropolis where traditions, Art of ways, to require a guide to better understand how to deal with it and know its pros and cons. Here is where the idea of writing The Dubai Phenomenon, the impossible becomes possible.*

*“Covid-19’s impact has been the acceleration of the energy transition worldwide.” Francesco La Camera, Director-General, IRENA The Energy Year Abu Dhabi 2021 has been conceived and developed as a critical tool for understanding the successful energy transition taking place in the emirate of Abu Dhabi and, by extension, the wider Middle East. It is no surprise that energy industry leaders worldwide as it pursues the long-term goal of a sustainable energy future via ambitious investments and development programmes in clean energy sources such as nuclear and solar energy. “Even in the most drastic scenario in terms of demand, we will still need oil. For us the energy transition is about combining, in the smartest way, all types of technologies to achieve an affordable, reliable and clean energy future.” Country Chair, TotalEnergies The Energy Year Abu Dhabi 2021 showcases the progress made by all key industry players, both public and private, towards the ambitious UAE Energy Strategy 2050. The report features not only the most relevant oil and gas upstream and downstream projects, but the critical projects enabling the energy transition in the country such as the Barakah Nuclear Energy upcoming Al Dhafra Solar PV Project and many others. This tenth edition of The Energy Year’s Abu Dhabi series provides insight to potential investors on the government’s efforts to push the energy industry forwards, providing a clear picture of the UAE’s opportunities at a time when gas is becoming the key enabler of the energy transition.*

*A Comprehensive Guide to Solar Energy Systems: With Special Focus on Photovoltaic Systems, the most advanced and research focused text on all aspects of solar energy engineering. It is a must have edition on the present state of solar technology, integration and worldwide distribution. In addition, the book provides a high-level assessment of the growth trends in photovoltaics and how investment support those innovations. Each chapter includes a research overview with a detailed analysis and new case studies that look at how recent research developments can be applied. Written by some of the most forward-thinking professionals, this book is an invaluable reference for engineers. Contains analysis of the latest high-level research and explores real world application potential in relation to imperial units throughout to appeal to global engineers Offers measurable data written by a world expert in the field on the latest developments in this fast moving and vital subject This outlook highlights climate-safe investment options until 2050, policies for transition and specific regional challenges. It also explores options to eventually cut emissions to zero.*

*Routledge Handbook of Planning and Management of Global Strategic Infrastructure Projects*

*A Comprehensive Guide to Solar Energy Systems*

*Multidimensional Assessment and Smart Solutions*

*Desalination*

*2017 Article IV Consultation– Press Release: Staff Report and Informational Annex for the United Arab Emirates*

*The Business Year: Dubai 2020*

*A swift policy response helped mitigate the economic impact of the twin COVID-19 and oil price shocks and contain the initial spread of the virus. A gradual recovery driven by the non-oil sector is underway, following a deep recession in 2020. Fiscal and external balances have improved with recent oil price increases. The UAE is among the world leaders in delivering vaccinations, with nearly 85 percent of the population fully vaccinated as of October 2021.*

*The meteoric expansion of the solar (PV) industry resulted from an incredible reduction in the prices of PV systems—first described in the author’s earlier book Sun above the Horizon. It began early in the new century and continued in the following decade with an extraordinary upswing. As a result, by the end of 2016, the worldwide PV operational power capacity grew to some 300 GW. Most of this increased capacity, 250 GW, was installed during the years 2010–2016. Suddenly PV started to affect the traditional generation of electricity and helped reduce carbon emissions and other environmental impacts. This book describes how this happened. Three practically unlimited new PV markets—residential, commercial, and utility scale—materialized, along with the new PV-oriented financial systems needed to provide the required gargantuan-scale capital. This book also highlights the increasing demand for and the corresponding increased supply of PV cells and modules on four continents and the impact of this PV breakthrough on our lives and future. To present this unparalleled story of societal transformation, the author was helped by the contributions of top experts Wolfgang Palz, Michael Eckhart, Allan Hoffman, Paula Mints, Bill Rever, and John Wohlgemuth.*

*Both Africa and the Middle East are blessed with enormous solar energy resources. Electrification is an urgent need in Africa, where many of its 54 countries are among the world’s fastest-growing economies, but where half the population still has no access to electricity. Solar energy is seen as the fastest and easiest path to addressing this need. Oil-rich countries in the Middle East are turning to solar energy to meet the growing domestic demand for electricity, freeing up hydrocarbons for export. This book describes the energy transition in Africa and the Middle East, from dependence on fossil fuels to increasing reliance on solar energy. The authors were assisted by the contributions of top experts Wolfgang Palz, Anil Cabraal, and Richenda Van Leeuwen in their efforts to provide a sound basis for understanding where solar energy is heading in these two important global regions.*

*The UAE is adjusting to the “lower-for-longer” oil price environment from a position of strength, which is reflected in its large financial buffers, long-standing safe-haven status, diversified and business-friendly economy, and sound financial system. The authorities are further streamlining spending and improving the business environment. Yet fiscal and external balances have weakened, the economy has decelerated, and banks are having to adapt to the more challenging environment.*

*The Report: Dubai 2018*

*Future of solar photovoltaic*

*Water from Water*

*Sustainable Development and Social Responsibility—Volume 2*

*Proceedings of the 2nd American University in the Emirates International Research Conference, AUEIRC’18-Dubai, UAE 2018*

*This book contains the proceedings of the 13th KES International Conference on Sustainability and Energy in Buildings 2021 (SEB2021) held in Split, Croatia, during 15–17 September 2021 organized by KES International. SEB21 invited contributions on a range of topics related to sustainable buildings and explored innovative themes regarding sustainable energy systems. The conference formed an exciting chance to present, interact and learn about the latest research and practical developments on the subject. The conference attracted submissions from around the world. Submissions for the Full-Paper Track were subjected to a blind peer-review process. Only the best of these were selected for presentation at the conference and publication in these proceedings. It is intended that this book provides a useful and informative snapshot of recent research developments in the important and vibrant area of sustainability in energy and buildings.*

*Dubai. Città à nata solo da pochi decenni dal deserto e che si è guadagnata il posto di città à dei record. Una città à intrigante, piena di fascino.....Piena di sorprese sbalorditive. Una città à in cui tradizioni, cultura araba e innovazione ogni giorno si combinano in mille modi tanto da aver bisogno di una guida per meglio capire come affrontarla e sapere cosa fare e cosa assolutamente evitare. Da qui nasce l' idea di scrivere a quattro mani Fenomeno Dubai dove l' impossibile diventa possibile. Due international business developer manager, Loredana Bocchieri e Valeria Al- Heureithi raccontano di Dubai in un libro che vuole essere una guida per chi vuole fare business, per chi vuole trasferirsi o semplicemente per chi è curioso di conoscere questa magnifica città à.*

*This book explores the evolving roles of energy stakeholders and geopolitical considerations, leveraging on the dizzying array of planned and actual projects for solar, wind, hydropower, waste-to-energy, and nuclear power in the region. Over the next few decades, favorable economics for low carbon energy sources combined with stagnant oil demand growth will facilitate a shift away from today ’s fossil fuel-based energy system. Will the countries of the Middle East and North Africa be losers or leaders in this energy transition? Will state—society relations undergo a change as a result? It suggests that ultimately, politics more so than economics or environmental pressure will determine the speed, scope, and effects of low carbon energy uptake in the region. This book is of interest to academics working in the fields of International Relations, International Political Economy, Comparative Political Economy, Energy Economics, and International Business. Consultants, practitioners, policy-makers, and risk analysts will also find the insights helpful.*

*This book provides a comprehensive overview of the practice of sustainability through a diverse range of case studies spanning across varied fields and areas of expertise. It provides a clear indication as to the contemporary state of sustainability in a time faced by issues such as global climate change, challenges of environmental justice, economic globalization and environmental contamination. The Palgrave Handbook of Sustainability explores three broad themes: Environmental Sustainability, Social Sustainability and Economic Sustainability. The authors critically explore these themes and provide insight into their linkages with one another to demonstrate the substantial efforts currently underway to address the sustainability of our planet. This handbook is an important contribution to the best practises on sustainability, drawn from many different examples across the fields of engineering, geology, anthropology, sociology, biology, chemistry and religion.*

*Sustainable Cities Reimagined*

*UNESCO Science Report*

*Global Perspectives on Sustainable Fashion*

*Routledge Handbook of Energy Law*

*Renewable energy market analysis: GCC 2019*

*Renewable Power Generation Costs in 2019*

*This book highlights the rightful role of citizens as per the constitution of the country for participation in Governance of a smart city using electronic means such as high speed fiber optic networks, the internet, and mobile computing as well as Internet of Things that have the ability to transform the dominant role of citizens and technology in smart cities. These technologies can transform the way in which business is conducted, the interaction of interface with citizens and academic institutions, and improve interactions between business, industry, and city government.*

*This book discusses the design and practice of environmental resources management for smart cities. Presenting numerous city case studies, it focuses on one specific environmental resource in each city. Environmental resources are commonly owned properties that require active inputs from the government and the people, and in any smart city their management calls for a synchronous combination of e-democracy, e-governance and IOT (Internet of Things) systems in a 24/7 framework. Smart environmental resources management uses information and communication technologies, the Internet of Things, internet of governance (e-governance) and internet of people (e-democracy) along with conventional resource management tools to achieve coordinated, effective and efficient management, development, and conservation that equitably improves ecological and economic welfare, without compromising the sustainability of development ecosystems and stakeholders.*

*The Report: Dubai 2018oford Business Group*

*An original and empirically grounded analysis of the Gulf monarchies and their role in shaping the political economy of the Middle East.*

*Policies, Markets and Emerging Issues*

*United Arab Emirates*

*Green Economy: Opportunities and Challenges*

*Money, Markets, and Monarchies*

*Routledge Handbook on China-Middle East Relations*

*United Arab Emirates: 2021 Article IV Consultation-Press Release, and Staff Report*

*We now are witnessing the dawn of an energy era where natural gas and renewable sources are fast substituting for crude oil, once dubbed Black Gold. From now on Black Gold is only as precious as coal. This paradigm shift is sure to relegate some countries that rely mostly on the sale of primary fossil fuels to abject poverty, while knowledge based economies grope their way to prosperity. The shock of this energy transition threatens to have devastating repercussions on the Middle East and Africa.*

*2020—the turn of decade, the intended year of Expo, and the eve of the UAE’s 50th anniversary—is indeed an opportune time. Even as shockwaves from a truly unexpected disruption, known colloquially as coronavirus and officially COVID-19, resonate around the world, Dubai’s diversification as well as its orientation toward innovation will undoubtedly help the Emirate lead the way through a challenging time. The Business Year’s country-specific publications, sometimes featuring over 150 face-to-face interviews, are among the most comprehensive annual economic publications available internationally. This 244-page publication covers green economy, banking, capital markets, insurance, energy, industry, telecommunications and IT, transport and logistics, maritime, real estate, construction, health, education, and tourism.*

*Energy Markets in Emerging Economies addresses current key issues, new opportunities, and various growth strategies relating to the energy markets in key emerging economies. The book addresses key aspects, including key oil and gas energy markets, and their strategic ties to global petrochemical and chemicals, shale gas, and renewable energy growths. It also provides insights on business strategies and market expansion strategies employed by MNCs and state-owned companies in maintaining and defending their positions in the global market, and in developing new markets and opportunities globally, particularly in China, India and the Middle East. The strategic implications of the global oil and gas prices fluctuations on the industries are also discussed. The practical and theoretical perspectives within the commercial context addressed in this book provide a clearer understanding of the energy markets and their leading players, relevant not only to industry players, but also interdependent markets.*

*This book examines complex challenges in managing major strategic economic and social infrastructure projects. It is divided into four primary themes: value-based approach to infrastructure systems appraisal, enabling planning and execution, financing and contracting strategies for infrastructure systems and digitising major infrastructure delivery. Within these four themes, the chapters of the book cover: the value and benefits of infrastructure projects planning for resilient major infrastructure projects sustainable major infrastructure development and management, including during mega events improving infrastructure project financing stakeholder engagement and multi-partner collaborations delivering major infrastructure projects effectively and efficiently whole-life-cycle performance, operations and maintenance relationship risks on major infrastructure projects public-private partnerships, design thinking principles, and innovation and technology. By drawing on insights from their research, the editors and contributors bring a fresh perspective to the transformation of major strategic infrastructure projects. This text is designed to help policymakers and investors select and prioritise their infrastructure needs beyond the constraining logic of political cycles. It offers a practical set of recommendations for governments on attracting private capital for infrastructure projects while creating clear social and economic value for their citizens. Through theoretical underpinning, empirical data and in-depth informative global case studies, the book presents an essential resource for students, researchers, practitioners and policymakers interested in all aspects of strategic infrastructure planning, project management, construction management, engineering and business management.*

*Leadership Strategies for Global Supply Chain Management in Emerging Markets*

*Principles of Sustainable Project Management*

*Renewable Energy Transition in Asia*

*Energy Markets in Emerging Economies*

*The Shock of Energy Transition*

*An International Perspective*

*In recent decades, the rapid expansion of trade and investment among developing countries has resulted in a scenario wherein firms from developing countries account for an increasing share of capital, goods, and wealth in the global economy. Industry leaders from developing countries have observed that firms in developing countries need supply chain capabilities in order to succeed in emerging markets. It is argued that customers in emerging markets are likely to have different needs and supply chain expectations as compared to customers in developed economies. Reaching into these emerging markets, understanding the customer diversity, and translating it into effective critical for the efficient design of supply chain operations. Leadership Strategies for Global Supply Chain Management in Emerging Markets is a pivotal reference source that provides vital research on creating efficient supply chain operations in emerging markets. While highlighting topics such as consumer behavior, global operations, and in publication investigates the needs of consumers in emerging markets as well as the methods of designing effective operations. This book is ideally designed for supply chain managers, logistics managers, operations and warehouse professionals, industry practitioners, academicians, students, and researchers.*

*IRENA’s latest global cost study shows solar and wind power reaching new price lows. The report highlights cost trends for all major renewable electricity sources.*

*Global Perspectives on Sustainable Fashion showcases the global fashion industry’s efforts to reduce the negative impacts associated with fashion production and consumption. Illustrated throughout with infographics, photographs and diagrams of creative works, eighteen essays focus on six regions, examining sustainable fashion in the context of environmental concerns. Also included are 18 regional ‘Spotlight’ sections highlighting the differences and similarities across regions by concentrating on examples of best practice, design innovation and impact on the community.*

*“Blue is the new green.” This is an all-new revised edition of a modern classic on one of the most important subjects in engineering: Water. Featuring a total revision of the initial volume, this is the most comprehensive and up-to-date coverage of the process of desalination in industrial and municipal applications, a technology that is becoming increasingly important as more and more companies choose to “go green.” This book covers all of the processes and equipment necessary to design, operate, and troubleshoot desalination systems, from the fundamental principles of desalination technology and membranes to the much more advanced engineering principles necessary for designing a design. The chapters cover the basic principles, the economics of desalination, basic terms and definitions, and essential equipment. The book then goes into the thermal processes involved in desalination, such as various methods of evaporation, distillation, recompression, and multistage flash. Following that is an exhaustive discussion of the membrane desalination, such as reverse osmosis, forward osmosis, and electrodialysis. Finally, the book concludes with a chapter on the future of these technologies and their place in industry and how they can be of use to society. This book is a must-have for anyone working in water, for engineers, technicians, scientists working in research and development, and also useful as a textbook for graduate classes studying industrial water applications.*

*The Gulf Cooperation Council and the Political Economy of the Contemporary Middle East*

*Renewable Energy Prospects*

*The Energy Regulation and Markets Review*

*The Energy Year Abu Dhabi 2021*

*Proceedings of MoSiCom 2020*

*Sustainability in Energy and Buildings 2021*

*This handbook brings together a mix of established and emerging international scholars to provide valuable analytical insights into how China’s growing Middle East presence affects intra-regional development, trade, security, and diplomacy. As the largest extra-regional economic actor in the Middle East, China is the biggest source of foreign direct investment into the region and the largest trading partner for most Middle Eastern states. This pertends a larger role in political and security affairs, as the value of Chinese assets combined with a growing expatriate population in the region demands a more proactive role in contributing to regional order. Exploring the effect of these developments, the expert contributors also consider the reverberations in great power politics, as the United States, Russia, India, Japan, and the European Union also have considerable interests in the region. The book is divided into four sections: • Historical and policy context • State and regional case studies • Trade and development • International relations, security, and diplomacy. This volume is an essential reference for scholars and policy-makers in the fields of international relations, political sociology, international political economy, and foreign policy analysis. Area studies specialists in Middle Eastern Studies, China Studies, and East Asian Studies will also find it an invaluable resource.*

*Indonesia is the largest country in the Association of Southeast Asian Nations (ASEAN), accounting for around two fifths of the region’s energy consumption. Energy demand across the country’s more than 17,000 islands could increase by four fifths and electricity demand could triple between 2015 and 2030. While reliance on domestic coal and imported petroleum products has grown, Indonesia has started adding more renewables to its energy mix. The country has set out to achieve 23% renewable energy use by 2025, and 31% by 2050. REMap – the global roadmap from the International Renewable Energy Agency (IRENA) – addresses this challenge, presenting a range of technology and resource options, along with key insights on the opportunities and challenges ahead. As this REMap country report shows, Indonesia could feasibly exceed its current goals and deploy even more renewables. In fact, the country could reach its 2050 target two decades sooner - by 2030.*

*This book presents articles from the International Conference on Modelling, Simulation and Intelligent Computing (MoSiCom 2020), held at Birla Institute of Technology and Science PlanI, Dubai Campus, Dubai, UAE, in January 2020. Modelling and simulation are becoming increasingly important in a wide variety of fields, from Signal, Image and Speech Processing, and Microelectronic Devices and Circuits to Intelligent Techniques, Control and Energy Systems, and Power Electronics. Further, Intelligent Computational techniques are gaining significance in interdisciplinary engineering applications, such as Robotics and Automation, Healthcare Technologies, IoT and its Applications. Featuring the latest advances in the field of engineering applications, this book serves as a definitive reference resource for researchers, professors and practitioners interested in exploring advanced techniques in the field of modelling, simulation and computing.*

*E-Democracy for Smart Cities*

*On the Road to a Solar Energy Future*

*Indonesia*

*Global Renewables Outlook: Energy Transformation 2050*