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ECONOMY

China and India

The quest for energy resources in the
twenty-first century

Zhao Hong



China and India

The book sheds understanding on the relations between development and global energy security by looking at China and India. It addresses the following issues: What is the new definition of energy security? How does it affect global politics and international relations? What are the energy security concerns of China and India, and what policies and approaches have they taken to deal with energy security issues? Since China and India are searching for oil and gas in the Middle East, Africa, and Southeast Asia, will their acquisition efforts conflict with the interests of other energy giants, such as the US and Japan, and will their growing overseas activities challenge US policy in those energy-rich regions?

The book provides insight into what the new global energy order may be and how the growth models and energy structures may shape the economic growth and energy. It analyzes both the state-centered approach and market-oriented approach in the global quest for energy resources. It also examines how China and India can adopt a cooperative approach for beneficial relations.

The book will be of interest to anyone who is keen to learn how the world, especially the US, can accommodate and adapt to the new global energy dynamics and how China and India operate as new players in global energy markets.

Zhao Hong is Senior Research Fellow at the East Asian Institute (EAI), National University of Singapore. Before coming to EAI, he was Professor at the Research School of Southeast Asian Studies, Xiamen University, where he taught International Political Economy, Big Power Relations, and Southeast Asian Economy. His research interests are mainly China–ASEAN economic integration, China–India energy competition and cooperation, and East Asian community.

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From early 2009, I was back at EAI as a visiting senior research fellow. I wrote two EAI Background Briefs on China’s oil venture in Africa, and China’s and India’s energy policies, and gave presentations on this topic at the University of Malaya and the University of Auckland, New Zealand. It was in this year when Ms Lam Yong Ling, editor at Routledge in Singapore, invited me to write a book on China and India and their overseas energy quest and competition. I was more than happy to agree and am grateful for her kind offer and support. For the next two years, I worked feverishly on this research project, making full use of the research facilities at the EAI and National University of Singapore libraries, interviewing many Chinese, Indian, and American scholars on this topic at various conferences and workshops. That I could eventually finish this humble book was due to many people who helped and supported me in my academic career over the past years. Although they might not have opportunity to read my manuscript, I wish to profusely thank them for their kind help and important guidance.

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Abbreviations

ADB	Asian Development Bank
AOC-BOC	Assam Oil Companies-Burmah Oil Company
ARF	ASEAN Regional Forum
ASEAN	Association of South-East Asian Nations
b/d	barrels per day
bb/d	billion barrels per day
bb	billion barrels of oil
bcm	billion cubic meters
BCP	Burma Communist Party
bt	billion tons
Btu	British Thermal Unit
CNOOC	China National Offshore Oil Corporation
CNPC	China National Petroleum Corporation
CTL	coal to liquids
EAI	East Asian Institute
EIA	Energy Information Administration (US)
FDI	foreign direct investment
FOCAC	Forum on China–Africa Cooperation
FTA	free-trade agreement
GAIL	Gas Authority of India Ltd
GCC	Gulf Cooperation Council
GDP	gross domestic product
GNI	gross national income
GNP	gross national product
GNPOC	Greater Nile Petroleum Operating Company
IAEA	International Atomic Energy Agency
IEA	International Energy Agency
IEEJ	Institute of Energy Economics, Japan
IOCs	International Oil Companies
IOC	Indian Oil Corporation
ISEAS	Institute of Southeast Asian Studies
ITEC	Indian Technical and Economic Cooperation
KOGAS	Korea Gas Corporation

xviii *Abbreviations*

LNG	liquefied natural gas
M&A	Mergers and acquisitions
mb/d	million barrels per day
MOGE	Myanmar Oil & Gas Enterprise
MoU	memorandum of understanding
mt	million tones
mtce	million tones of coal equivalent
mtoe	million tones of oil equivalent
NBR	National Bureau of Asian Research
NDRC	National Development and Reform Commission
NEA	National Energy Administration
NEC	National Energy Commission
NOCs	National Oil Companies
OECD	Organization for Economic Cooperation and Development
OFDI	outward foreign direct investment
OIL	Oil India Ltd
ONGC	Oil and National Gas Corporation (India)
OPEC	Organization of the Petroleum Exporting Countries
OSSI	Oil Supply Securities Index
OVL	ONGC Videsh Ltd
PPP	purchasing power parity
PRC	People's Republic of China
PSC	Production Sharing Contracts
SASAC	State Asset Supervision and Administration Commission
Sinopec	China Petroleum and Chemical Corporation
SLOC	sea lanes of communication
SLORC	State Law and Order Restoration Council (Myanmar)
SOE	state-owned enterprise
tcm	trillion cubic meters
TWh	terawatt hours
UAE	United Arab Emirates
UNCTAD	United Nations Conference on Trade and Development

1 China, India, and the new global energy order

1.1 The Asian century?

This book has been motivated largely by the huge changes in the world economy that have occurred since the new millennium. The most important change has been the rise of China and India—the two biggest emerging economies in the world. Is the twenty-first century going to be the Asian century, as the twentieth century was the American century and the nineteenth century was Europe's? Many agree that it might be thanks to the contribution of China and India to the world's economic growth.

In the last two decades, Asia's economic growth has diverged from that of other developing regions. Since the mid-1980s, economic growth in emerging Asia (including China and India) has been much stronger than elsewhere. Such growth has benefited from economic integration with the global economy. From the mid-1990s, China and India started to make their mark in the world economy. In 2009, according to World Bank, the Asia and Pacific region accounted for almost one-third of global GDP, while 54 percent of the region's GDP comes from just China and India.¹

Thanks to policies of reform and openness, China has experienced rapid economic growth over past decades. In total economic size, China has quickly caught up with other large economies. In 2008, it overtook Germany to be the third largest economy in the world, and in 2010 it surpassed Japan to be the second largest economy (Table 1.1). Various projections have been made to estimate the timing of China becoming the world's largest economy. As early as 1997, the World Bank published a report to prognosticate about China's rise in the twenty-first century as a world economic power and predict that China will overtake the US to become the world largest economy in the 2020s.²

At market exchange rate, India's GNI (Gross National Income) in 2009, at US\$1,367.1 billion, was the eleventh largest in the world, accounting for 9.6 percent of that of the US. Emerging from decades of economic insulation, the country's economy has been growing strongly with the result that vast amounts of wealth have been accumulated and the number of poor has been greatly reduced.

Another alternative way to measure the size of an economy is by purchasing power parity (PPP). A PPP GDP is computed by converting its value to