

India's Quest for Energy Through Oil and Natural Gas

Sanjay Kumar Pradhan

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Trade and Investment, Geopolitics,
and Security

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*This work is in memory of my mother late
Smt. Sushila Pradhan*

Preface

India's quest for energy has transmitted its relationship with other countries from the buyer–seller to the level of strategic partnership. The economic liberalization and growing demand for more energy resources have prompted India to change its policy to access oil and natural gas assets abroad. Accordingly, diversification and investment are two major approaches followed by the Indian government to intensify its engagement with the oil and natural gas-rich countries in the world. However, in the process of trade and investment, the geopolitical dynamics, domestic issues and security concerns have necessitated for introspection of India's quest for energy security through oil and natural gas resources. As India is the third largest importer and consumer of oil and natural gas in the world, by 2025, it is expected to overtake China—the second largest consumer of energy after the USA. By 2040, as projected, the Indian market will constitute about a quarter of the growth in global energy demand, and New Delhi is now looking for various international destinations to meet its energy requirements. Significantly, shale energy has added a new dimension to India's external engagements. India has been looking for all possible overseas destinations for oil and natural gas imports, while stimulating its own sources of energy, along with focus on renewables. India has posed as a potential contender in investing upstream, midstream and downstream sectors of energy economy, and energy has turned as a strategic resource in New Delhi's resource diplomacy and foreign policy discourse that includes secured, reliable, uninterrupted and affordable supply of energy. Therefore, energy has posed as “second to India's food security”, and New Delhi aptly tries to achieve its energy security, so as to have a decisive role in international energy architecture, rightful place in the global politics, and a greater degree of independent foreign policy pursuance. Accordingly, India has steered for diversification of its energy basket and investment in the overseas energy assets. India has established or fastened its footprints in the oil and natural gas sectors of Africa, West Asia, Central Asia, the Latin America and the Caribbean (LAC), Arctic, South China Sea, Russia and the USA, along with the pipeline options. While explaining the conceptual frameworks of geopolitics of energy and energy security and contextualising energy security in the Indian context in the first chapter of the book, the subsequent chapters have

attempted at analysing geopolitics and security aspects of India's trade and investment in the international energy market—both region and country-specific. In its concluding part, the book has recommended action plan for promotion of existing trade and investment opportunities in the oil and natural gas sectors abroad, while suggesting for renewable energy resources so as to enrich India's energy basket in its quest for low carbon emissions and clean energy. Throughout the analysis, qualitative method is applied, with some focus on quantitative data. The historical perspective has also been resorted to substantiate India's strategic engagement with the oil-rich countries and the major powers—broadly through the changing geopolitical dynamics and energy security perspectives. With regard to the literature, the government reports, information from the international and regional organizations and forums, books, journals and internet sources have been extensively used for data collection and analysis. Specifically, my earlier publications—related to geopolitics of energy and energy security—have been referred whenever required, but with the modifications and new orientations. “India and Africa: Quest for Oil and Gas” (Indian Foreign Affairs Journal, July–September 2012), “Spratly Dispute: Looking through Oil and Gas and India's Energy Approaches” (World Focus, June 2012), and “Indo-Russian Energy Cooperation: Geopolitics in a Fluid Matrix” (Economic & Political Weekly, 10 February 2018) have provided basic grounds to develop Chaps. 2, 6 and 8, respectively, with the due approval of the journals concerned.

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Dr. Sanjay Kumar Pradhan

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Acronyms

AC	Arctic Council
ADB	Asian Development Bank
ADNOC	Abu Dhabi National Oil Company
AEP	Act East Policy
AFRICOM	United States Africa Command
ANCAP	Administración Nacional de Combustibles Alcohol Portland
APERC	Asia Pacific Energy Research Centre
ARF	ASEAN Regional Forum
ASEAN	Association of South East Asian Nations
ASSOCHAM	Associated Chambers of Commerce and Industry of India
AU	African Union
AUC	African Union Commission
BAU	Business-As-Usual
BCM	Billion Cubic Metre
BIMSTEC	Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation
BOE	Barrels of Oil Equivalent
BPCL	Bharat Petroleum Corporation Limited
BPRL	Bharat Petro Resources Limited
BRICS	Brazil–Russia–India–China–South Africa
CAGR	Compound Annual Growth Rate
CARICOM	Caribbean Community and Common Market
CBM	Coal Bed Methane
CELAC	Community of Latin American and Caribbean States
CIA	Central Intelligence Agency
CIS	Commonwealth of Independent States
CNG	Compressed Natural Gas
CNOOC	China National Offshore Oil Corporation
CNPC	China National Petroleum Corporation
COP21	21st Conference of the Parties

CPCIA	China Petroleum and Chemical Industry Association
CSS	Committee of State Security
CSTO	Collective Security Treaty Organisation
CTL	Coal-to-Liquid
DES	Delivered Ex Ship
DGFI	Directorate General of Forces Intelligence
DGH	Directorate General of Hydrocarbons
DOC	Declaration on the Conduct of Parties
DOE	Department of Energy
E&P	Exploration and Production (E&P)
EAEU	Eurasian Economic Union
EEZ	Exclusive Economic Zone
EIA	US Energy Information Administration
EIL	Engineers India Limited
ELN	Ejercito de Liberación Nacional
ENAP	Empresa Nacional de Petróleo
ENARSA	Argentina's Energía Argentina S.A
EXIM Policy	Export Import Policy
FARC	Fuerzas Armadas Revolucionarias de Colombia
FDI	Foreign Direct Investment
FLEC	Front for the Liberation of the Enclave of Cabinda
FNDIC	Federated Niger Delta Ijaw Communities
FSB	Federal Security Service
FTA	Free Trade Agreement
FUC	United Front for Democratic Change (Front uni pour le changement)
GAIL	Gas Authority of India Limited
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GHG	Greenhouse Gases
GNPOC	Greater Nile Petroleum Operating Company
GRM	Gross Refining Margins
GSPA	Gas Sale and Purchase Agreement
GSPC	Gujarat State Petroleum Corporation
GTCL	Gas Transmission Company Limited
GW	Gigawatt
HPCL	Hindustan Petroleum Corporation Limited
IBFPL	Indo-Bangla Friendship Pipeline
IBSA	India–Brazil–South Africa
ICD	International Cooperation Division
ICJ	International Court of Justice
IEA	International Energy Agency
IEF-16	International Energy Forum-16
IMF	International Monetary Fund
INDC	Intended Nationally Determined Contributions

INSTC	International North South Trade Corridor
IOCL	Indian Oil Corporation Limited
IPE	International Political Economy
IPI	Iran–Pakistan–India
IRENA	International Renewable Energy Agency
IS	Islamic State
ISA	International Solar Alliance
ISGS	Inter State Gas Systems (Private) Limited
ISI	Inter-Service Intelligence
ISIL	Islamic State of Iraq and the Levant
ISIS	Islamic State of Iraq and Syria
ITEC	Indian Technical and Economic Cooperation
IUPF	Indo–US Parliamentary Forum
JCERDC	Joint Clean Energy Research and Development Center
KG	Krishna–Godavari Basin
KNOC	Korea National Oil Corporation
KOGAS	Korea Gas Corporation
KPC	Kuwait Petroleum Corporation
LAC	Latin America and the Caribbean
LNG	Liquefied Natural Gas
LOC	Lines of Credit
LPG	Liquefied Petroleum Gas
MBI	Myanmar–Bangladesh–India
MDGs	Millennium Development Goals
MECL	Mansarovar Energy Colombia Limited
MEND	Movement for the Emancipation of the Niger Delta
MMBTU	Million Metric British Thermal Units
MMT	Million Metric Tonnes
MNC	Multinational Company
MNRE	Ministry of New and Renewable Energy
MOGE	Myanmar Oil and Gas Enterprise
MOU	Memorandum of Understanding
MPNG	Ministry of Petroleum and Natural Gas
MRPL	Mangalore Refinery and Petrochemicals Ltd
MT	Million Tonnes
MTCO ₂ Eq	Metric Tons of Carbon Dioxide Equivalent
MTOE	Million Tonnes of Oil Equivalent
MW	Megawatt
NAM	Non-Aligned Movement
NAMA	Nationally Appropriate Mitigation Action
NATGAS	National Gas Company
NATO	North Atlantic Treaty Organisation
NDC	Nationally Determined Contribution
NELP	New Exploration Licensing Policy
NEPAD	New Partnership for Africa’s Development

NGHP	National Gas Hydrate Programme
NGL	Natural Gas Liquid
NITI Ayog	National Institution for Transforming India Ayog
NSR	Northern Sea Route
OAS	Organization of American States
OBOR	One Belt One Road
OECD	Organization for Economic Co-operation and Development
OIC	Organization of Islamic Cooperation
OIL	Oil India Limited
OMEL	ONGC-Mittal Energy Limited
ONGC	Oil and Natural Gas Corporation of India
OPEC	Organisation of the Petroleum Exporting Countries
OVL	ONGC-Videsh Limited
PACE	Partnership to Advance Clean Energy
PdVSA	Petróleos de Venezuela, S.A
PetroSA	Petroleum Oil and Gas Corporation of South Africa
PSC	Production Sharing Contract
PSU	Public Sector Undertaking
PSUV	United Socialist Party of Venezuela
PTA	Preferential trade agreement
QUELRO	Quantified Emissions Limitation and Reduction Objective
R&D	Research & Development
RCI	Russia–China–India
RE	Renewable Energy
REEEP	Renewable Energy and Energy Efficiency Partnership
REN21	Renewable Energy Policy Network for the 21st Century
R–TAPI	Russia–TAPI
SAARC	South Asian Association for Regional Cooperation
SAGE	South Asia Gas Enterprise Private Limited
SAP	Structural Adjustment Programme
SCO	Shanghai Cooperation Organization
SCS	South China Sea
SICA	Central American Integration System
SINOPEC	China Petroleum and Chemical Corporation
SIS	Secret Intelligence Service (M16)
SNC	Syrian National Coalition
SOMO	State Oil Marketing Organization
TAPI	Turkmenistan–Afghanistan–Pakistan–India
TBD	Thousands of Barrels per Day
TCF	Trillion Cubic Feet
TCM	Trillion Cubic Metre
TEAM-9	Techno-Economic Approach for Africa-India Movement
TMB	Thousand Million Barrels
TPP	Trans Pacific Partnership
UAR	United Arab Republic

UN	United Nations
UNCHR	UN Commission on Human Rights
UNCLOS	United Nations Commission on the Limits of the Continental Shelf
UNCLOS	United Nations Convention for the Law of the Sea
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USGS	US Geological Survey
USISPF	US–India Strategic Partnership Forum
USSR	Union of Soviet Socialist Republics
VLCC	Very Large Crude Carrier
WPI	Wholesale Price Index
WTI	West Texas Intermediate
WTO	World Trade Organisation

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