

Table of Contents

Preface	11
Acknowledgement	13
Abbreviations	15
Chapter One: Energy and Mankind: An Enduring Relationship	17
1.1 / Introduction.....	17
1.2 / Understanding Energy Transitions.....	18
1.3 / Three Actors, Three Pathways.....	19
1.4 / A Look Back: Earlier Energy Transitions.....	20
1.5 / Understanding Energy Transitions.....	22
1.6 / The Early Shape of a Global Shift.....	23
1.7 / Three Sets of Stakeholders Shaping the Transition.....	24
1.8 / Analytical Focus and Guiding Propositions.....	25
1.9 / Case Study: States, Companies and Local Communities.....	26
1.10 / Limits and Assumptions of the Research.....	27
1.11 / Research Methodology.....	28
1.12 / Significance of the Study.....	29
Chapter Two: Conceptual Foundations: Understanding Transition Through MLP	31
2.1 / Introduction: Why MLP Matters Today.....	31
2.2 / How Scholars Have Tried to Make Sense of the Transition.....	32
2.3 / Energy Transition as a Global Systemic Issue.....	32
2.4 / Energy Pathways and Socio-Technical Change.....	33
2.5 / Sustainability and Development Perspectives.....	33
2.6 / MLP: Architecture of a Transition.....	34
2.7 / Three Approaches Within MLP Tradition.....	36
2.8 / Sustainable Development and MLP.....	38
2.9 / Why MLP is Central to This Study.....	39

2.10 /	Conclusion: Transition as an Existential Imperative ..	40
Chapter Three: The Role of the State in Energy Transition 41		
3.1 /	The State in Welfare and Development Policies.....	41
3.2 /	The State and Energy Policy.....	41
3.3 /	National Development Goals and the State’s Role .	42
3.4 /	The State and Technology Promotion.....	42
3.5 /	The Developing-Country Context: Growth Imperatives and Energy Needs.....	43
3.6 /	Brazil: Crisis, Reform and Energy Transition Politics.	44
3.7 /	State, Society and Energy in Brazil: Rousseff’s Presidency and Beyond.....	48
3.8 /	Private Sector and NGO Engagement in the Climate–Energy Real.....	51
3.9 /	Brazil’s Climate Commitments Drive Renewable Energy Expansion	51
3.10 /	An MLP Interpretation: Brazil’s Hydro-Energy Sector	54
3.11 /	Conclusion	55
Chapter Four: Local Community: Architect of Energy Transition 57		
4.1 /	Understanding the ‘Local Community’.....	57
4.2 /	Community Participation	58
4.3 /	Community Leadership	58
4.4 /	The Role of Local Communities in Policy Formulation	59
4.5 /	Local Community Participation in the Renewable Energy Sector Worldwide	60
4.6 /	Engaging Communities in Renewable Transitions	62
4.7 /	The Significance of Local Ownership in Clean Energy Projects	63
4.8 /	Denmark: From Grassroots Wind to State-Coordinated Transition.....	64
4.9 /	An MLP Interpretation: Denmark’s Wind Transition.....	73

4.10 / Conclusion	75
Chapter Five: Private Sector: Shaping the Energy Transition Through Its Inherent Interests	77
5.1 / What Do We Mean by “Private Sector”?	77
5.2 / The Private Sector’s Pivotal Role in the Energy Sector	78
5.3 / The Private Sector and Sustainable Development.....	79
5.4 / India: Market-Led Transition under Fossil Dependence.....	81
5.5 / Claro Energy: A Start-up’s Solar Journey.....	85
5.6 / Jain Irrigation Systems Ltd.: From Irrigation to Multinational Enterprise	86
5.7 / Solar Energy in India: Multi-Level Perspective	88
5.8 / Conclusion	90
Chapter Six: Re-Defining Energy Transition: Stakeholder Actors as Co-Partners	91
6.1 / Energy Transition Advancing, with Hitches	91
6.2 / Misinformed Transition	91
6.3 / Transition Unfolding in an International System	92
6.4 / Speculated Transition Pathways.....	92
6.5 / Emerging Patterns of Engagement	93
6.6 / Building a Level Playing Field	93
6.7 / Predictions Are Not Enough: Real Action.....	95
6.8 / Practical Actions	95
6.9 / Conclusion	96
Chapter Seven: The Way Ahead.....	99
Bibliography	105