

## CONTENTS

Chapter One	Introduction: Entering the Green Industrial Revolution .....	1
1.	1. Purpose of the Book: Innovative Green Development in Theory and in Practice .....	1
1.	2. International Background: the Continuously Expanding Gap Between Humanity and Nature .....	6
1.	3. The Domestic Background: Becoming the Innovators of Green Revolution .....	12
1.	4. Research Issues and Framework .....	17
Chapter Two	The Theory of Green Development .....	20
2.	2.1 The Three Sources of the Theory of Green Development ...	22
2.	2.1.1 The Unity of Nature and Humanity in Traditional Chinese Philosophy .....	22
2.	2.1.2 Dialectics of Nature in Marxist Philosophy .....	25
2.	2.1.3 The Theory of Sustainable Development in Modern Times ...	29
2.	2.2 The Meaning of Green Development .....	34
2.	2.3 Green Industrial Revolution: From the First to the Fourth Industrial Revolutions .....	41
2.	2.3.1 Economic Perspective of Green Industrial Revolution ...	41
2.	2.3.2 Main Features of the Green Industrial Revolution .....	47
2.	2.3.3 The Most Important Goal of the Green Industrial Revolution: Full Decoupling .....	52
2.	2.3.4 The Results of the Green Industrial Revolution: Toward an Era of Green Civilization .....	55

2. 4 The Three Major Systems of Green Development: Social, Economic, and Natural .....	56	4. 4. 1 From Massive Energy Consumption to Integration of Energy Consumption .....	127
2. 5 The Wealth of Green Development: From Nominal GDP to Green GDP .....	62	4. 4. 2 From a Large Greenhouse Gas-emitting to a Low-carbon Nation .....	129
2. 6 Stages of Green Development: From Ecological Deficit to Surplus .....	68	4. 4. 3 From Pollution Emissions to Emission Reductions .....	131
2. 7 Green Innovation and the Tunneling Effect .....	73	4. 4. 4 From Ecological Destruction to Construction .....	133
2. 8 The Contents and Pathways of Green Development .....	75	4. 5 Twenty-first Century: Toward a Natural Surplus .....	136
<b>Chapter Three Global Ecological Crisis .....</b>	<b>82</b>	<b>Chapter Five Green Development Plan .....</b>	<b>143</b>
3. 1 Development Model of Black Industrial Civilization .....	84	5. 1 National Plan to Promote Green Development .....	146
3. 1. 1 Huge Invisible Natural Capital Depletion and Development Costs .....	85	5. 1. 1 Period of Black Development—First to Fifth Five-Year Plans .....	146
3. 1. 2 Excessive Consumption, Expenditure, and Emissions .....	88	5. 1. 2 Initial Transition—Sixth to Eighth Five-Year Plans .....	147
3. 1. 3 High Ecological Footprints and Huge Natural Resource Rents .....	91	5. 1. 3 Further Transition—Ninth to Tenth Five-Year Plans .....	149
3. 2 Unprecedented Global Crisis .....	93	5. 1. 4 Turn to Green Development—Eleventh to Twelfth Five-Year Plans .....	151
3. 2. 1 Global Environmental Pollution Crisis .....	93	5. 2 Eleventh Five-Year Plan—Turning to Green Development .....	151
3. 2. 2 Crisis of Global Energy and Resources .....	94	5. 3 Twelfth Five-Year Plan—Green Development as the Theme .....	158
3. 2. 3 Extreme Climate Change .....	95	5. 4 Main Functional Area Planning—Remaking the Economic Geography of a Green China .....	163
3. 2. 4 Global Ecological Crisis .....	98	5. 5 China's Green Development Planning Road .....	168
3. 3 Green Development Opportunities .....	100	<b>Chapter Six Local Green Practice .....</b>	<b>176</b>
3. 3. 1 Rapid Growth of the Green Economy .....	101	6. 1 Green Beijing—Building a World-class Green Modernized Capital .....	178
3. 3. 2 Greener Industrial Structure .....	105	6. 1. 1 Green Beijing Road Map .....	180
3. 3. 3 Rapid Development of Green Energy .....	107	6. 1. 2 How Should Beijing Become Green? .....	184
3. 3. 4 Accelerating Green Technology Innovation .....	108	6. 2 Reforested Chongqing—Rising Green Star in the West .....	190
3. 4 Embracing the Forthcoming Green Civilization .....	109	6. 2. 1 History of Chongqing—U-Shaped Curve .....	192
<b>Chapter Four Green Developments in China .....</b>	<b>111</b>	6. 2. 2 Chongqing Today—Leader in Forestry Construction .....	193
4. 1 Historical Trajectory: From Natural Deficit to Surplus .....	113	6. 2. 3 Future of Chongqing—A Model of Ecological Civilization .....	196
4. 2 Agricultural Civilization—Slowly Expanding Natural Deficit .....	114		
4. 3 Industrialization—Rapidly Expanding Natural Deficit .....	118		
4. 4 Reform and Opening-up—the Natural Deficit Dramatically Increased, then Slowly Shrunk .....	123		



6.3 Ecological Qinghai—Providing China with its Largest Public Goods .....	199
6.3.1 From Industrial to Ecological Province .....	202
6.3.2 Elimination of Ecological Poverty as the Highest Priority .....	204
6.3.3 Protecting the Source of the Three Rivers—Providing Large Public Products .....	208
6.4 Green Transformation in Local Areas .....	211