

CHAPTER ONE: INTRODUCTION .....	1
STUDY GOAL AND OBJECTIVES .....	1
REASONS FOR DOING THE STUDY .....	1
INTENDED AUDIENCE.....	1
SCOPE OF THE REPORT .....	2
INFORMATION SOURCES.....	2
ANALYST’S CREDENTIALS.....	2
RELATED BCC REPORTS .....	3
BCC ONLINE SERVICES.....	3
DISCLAIMER .....	3
 CHAPTER TWO: SUMMARY.....	 4
OVERALL ENVIRONMENTAL PROTECTION AND CONTROL	
INDUSTRY TO 2013 .....	4
AIR POLLUTION CONTROL .....	4
WATER POLLUTION CONTROL .....	5
LAND POLLUTION CONTROL (MSW).....	6
<i>SUMMARY TABLE CURRENT SALES AND FORECASTS FOR</i>	
<i>ENVIRONMENTAL PROTECTION PRODUCTS AND EQUIPMENT</i>	
<i>IN CHINA, THROUGH 2013 (\$ MILLIONS)</i> .....	6
<i>SUMMARY FIGURE CURRENT SALES AND FORECASTS FOR</i>	
<i>ENVIRONMENTAL PROTECTION PRODUCTS AND EQUIPMENT</i>	
<i>IN CHINA, 2007-2013 (\$ MILLIONS)</i> .....	7
 CHAPTER THREE: OVERVIEW .....	 8
DEFINITION OF ENVIRONMENTAL PROTECTION AND	
CONTROL INDUSTRY.....	8
IMPORTANCE OF THE ENVIRONMENTAL PROTECTION AND	
CONTROL INDUSTRY.....	8
IMPORTANCE OF THE ENVIRONMENTAL...(CONTINUED).....	9
ECONOMIC GROWTH.....	10
POPULATION, RESOURCES, ENVIRONMENT.....	10
ENVIRONMENTAL PROTECTION AND CONTROL INDUSTRY	
HISTORY .....	11
ENVIRONMENTAL PROTECTION LEGISLATION AND	
SYSTEM .....	11
Environmental Protection ... (Continued).....	12
Environmental Protection ... (Continued).....	13
PREVENTION AND CONTROL OF INDUSTRIAL	
POLLUTION.....	14
Developing a Cyclical Economy .....	14
Taking Precautions against Environmental Emergencies .....	15
Instituting a Beginning-To-End Management System	
Over Dangerous Industrial Waste.....	16

Exercising Strict Safety Management on Nuclear and Radioactive Environments.....	16
POLLUTION CONTROL IN KEY REGIONS .....	16
Prevention and Control of Water Pollution in Key Drainage Areas.....	17
Prevention and Control of Pollution in the “Two Controlled Areas” .....	17
Air Pollution Control in Beijing .....	18
Control of Pollution in the Bohai Sea .....	18
PROTECTION OF THE URBAN ENVIRONMENT .....	18
Protection of the Urban Environment (Continued) .....	19
PROTECTION OF THE RURAL ENVIRONMENT.....	20
Comprehensive Control of the Rural Environment .....	20
Development of Eco-Agriculture and Ecological Demonstration Zones .....	21
Development of Dry-Farming and Water-Saving Agriculture.....	21
Development of New-Energy Projects in Rural Areas .....	22
ECOLOGICAL PROTECTION AND CONSTRUCTION .....	22
Afforestation .....	22
The Protection of Pastures .....	23
Land Protection, Development and Treatment.....	24
Water and Soil Conservation .....	24
Sand Prevention and Control.....	25
Marine Environmental Protection.....	25
The Construction of Nature Reserves, Protected Eco- Areas, and Places of Historical Interest and Scenic Beauty.....	26
Conservation of Biodiversity .....	27
Wetland Protection .....	28
ECONOMIC POLICY AND INVESTMENT CONCERNING THE ENVIRONMENT .....	28
Improving Policies Concerning Environment-Related Fee Collection .....	29
Formulating Price and Tax Policies Favorable to Environmental Protection.....	29
ENVIRONMENTAL IMPACT ASSESSMENT.....	30
ENVIRONMENTAL SCIENCE AND TECHNOLOGY, INDUSTRY AND PUBLIC PARTICIPATION .....	31
Environmental Protection Scientific Research.....	31
Environmental Protection Industry.....	32
<i>TABLE 1 CHINESE ENVIRONMENTAL PROTECTION INDUSTRY STRUCTURE, 2004 (\$100 MILLION)</i> .....	32
Public Participation.....	33

Publicity and Education .....	33
Protection of the Environmental Rights of the Public .....	34
Protection of the ... (Continued).....	35
<i>TABLE 2 HISTORICAL SALES FOR ENVIRONMENTAL PROTECTION PRODUCTS AND EQUIPMENT, 2006 AND 2007 (\$ MILLIONS)</i> .....	36
CHAPTER FOUR: AIR POLLUTION CONTROL SUMMARY .....	37
OVERALL AIR POLLUTION CONTROL INDUSTRY TO 2013 .....	37
DESULFURIZATION .....	37
DUST CONTROL .....	38
CATALYTIC CONVERTERS .....	38
<i>TABLE 3 PROJECTED MARKET FOR AIR POLLUTION CONTROL PRODUCTS AND EQUIPMENT, THROUGH 2013 (\$ BILLIONS)</i> .....	38
PRINCIPAL MARKET FORCES .....	38
PRINCIPAL MARKET FORCES (CONTINUED).....	39
CHAPTER FIVE: AIR POLLUTION CONTROL OVERVIEW .....	40
AIR POLLUTION CONTROL INDUSTRY DEFINITION .....	40
IMPORTANCE OF THE AIR POLLUTION CONTROL INDUSTRY.....	40
CHINA'S AIR POLLUTION SITUATION .....	40
<i>TABLE 4 BASIC STATISTICS ON ENVIRONMENTAL PROTECTION— ATMOSPHERE ENVIRONMENT, 2004-2006</i> .....	41
Dust Emission.....	41
Vehicle Emissions.....	42
Acid Rain.....	42
SO <sub>2</sub> Emissions.....	43
<i>TABLE 5 AIR POLLUTANT EMISSION IN CHINA, THROUGH 2013 (UNIT: 10K METRIC TONS)</i> .....	43
AIR POLLUTION CONTROL INDUSTRY HISTORY .....	43
DESULFURIZATION .....	43
<i>TABLE 6 OPERATED FGD CAPACITY OF TOP 10 PLAYERS IN CHINA BY THE END OF 2007</i> .....	44
<i>TABLE 6 (CONTINUED)</i> .....	45
DUST CONTROL.....	45
CATALYTIC CONVERTERS .....	46
<i>TABLE 7 HISTORICAL SALES OF AIR POLLUTION CONTROL PRODUCTS AND EQUIPMENT, 2006 AND 2007 (\$ BILLIONS)</i> .....	47
CHAPTER SIX: AIR POLLUTION CONTROL MARKETS.....	48
MARKET SEGMENTATION—AIR POLLUTION CONTROL .....	48
DESULFURIZATION INDUSTRY .....	48
DUST CONTROL INDUSTRY .....	48
VEHICLE EMISSION CONTROL INDUSTRY .....	49
DRIVING FORCES—AIR POLLUTION CONTROL.....	49
DRIVING FORCES—... (CONTINUED) .....	50

IMPACT ON OTHER INDUSTRIES-AIR POLLUTION CONTROLS .....	51
AIR POLLUTION HAVE SEVERE HEALTH IMPACTS .....	51
NON-HEALTH IMPACTS OF AIR POLLUTION .....	51
The Impact of Acid Rain and SO <sub>2</sub> on Crop Loss .....	51
Material Damage .....	52
PARTICIPANTS—AIR POLLUTION CONTROL.....	52
DESULFURIZATION INDUSTRY .....	52
Market Leaders in Desulfurization .....	52
Beijing Bootes Electric Power ScienceandTechnology Co., Ltd.....	52
Shandong Sanrong Group Ltd.....	53
Zhejiang Tiandi Environmental Protection Engineering Co., Ltd. ....	54
Insigma Technology Co., Ltd.....	55
Tsinghua Tongfang Environment Co., Ltd.....	56
Wuhan Kaidi Electric Power Environmental Protection Co., Ltd.....	57
Beijing Guodian Longyuan Environmental Engineering Co., Ltd. ....	57
China Power Investment Yuanda Environmental Protection Co., Ltd.....	58
Fujian Longking Co., Ltd.....	59
Zhejiang Feida Environmental Science and Technology Co., Ltd. ....	60
Foreign Companies in Desulfurization Sector .....	61
Guohua Ebara Environment Engineering Co., Ltd.....	61
DUST CONTROL INDUSTRY .....	61
Market Leaders in the Dust Control Industry .....	61
Zhejiang Feida Environmental Science and Technology Co., Ltd. (See “Market Leaders in Desulfurization” section for profile).....	61
Fujian Longking Co., Ltd. (See “Market Leaders in Desulfurization” section for profile).....	62
Zhejiang Jiehua Environment Science and Technology Co., Ltd. ....	62
Wujiang Kelin Group Co., Ltd.....	62
Shanghai Lingqiao Environmental Equipment Co., Ltd. ....	63
Lanzhou Electric Power Equipment Manufacture Co. Ltd.....	63
Henan Sinoma Environmental Protection Co., Ltd. ....	64
Shanghai Environmental Protection Machinery Engineering Corp., Ltd.....	64
Tianjie Environmental Engineering Co., Ltd. ....	64

Tsinghua Tongfang (Anshan) Environmental Protection Equipment Co. ....	65
Xikuang Environmental Protection Co., Ltd. ....	65
Zhejiang Sunyard Environmental Protection Co., Ltd. ....	66
Xuanhua Environmental Protection Equipment Co., Ltd. ....	67
Foreign Companies in Dust Control Sector .....	67
Shanghai Bag Filtration Equipment Co., Ltd. ....	67
VEHICLE EMISSION CONTROL INDUSTRY .....	68
Market Leaders in Vehicle Emission Controls .....	68
Wuxi Weifu Lida Catalytic Converter Co., Ltd. ....	68
Shanghai Langt Autocatalyst Co., Ltd. ....	69
Foreign Companies in Vehicle Emission Controls Sector .....	69
Umicore Autocat (China) Co., Ltd. ....	69
BASF Catalysts (Guilin) Co., Ltd. ....	70
Beijing Greentec Environmental Protection Equipment Co., Ltd. ....	70
Degussa AJ (Shanghai) Initiators Co., Ltd. ....	71
Shanghai Walker Exhaust System Co., Ltd. ....	72
Corning (Shanghai) Co., Ltd. ....	72
INFLUENCES ON THE AIR POLLUTION CONTROL MARKET .....	72
GOVERNMENT INVESTMENT IN THE 10 <sup>TH</sup> FIVE YEAR PLAN PERIOD (2001 TO 2005) .....	72
<i>TABLE 8 INVESTMENT FOR AIR POLLUTION CONTROL DURING THE 10<sup>TH</sup> FIVE YEAR PLAN (2001 TO 2005) (RMB BILLIONS)</i> .....	73
GOVERNMENT INVESTMENT IN THE 11 <sup>TH</sup> FIVE YEAR PLAN .....	73
Government Investment ... (Continued) .....	74
<i>TABLE 9 GOVERNMENT INVESTMENT IN THE 11<sup>TH</sup> FIVE YEAR PLAN FOR AIR POLLUTION CONTROL, 2006-2010 (\$ BILLION)</i> .....	75
GOVERNMENT AIR POLLUTION CONTROL TARGETS .....	76
Ensure Achieving SO <sub>2</sub> Emission Reduction Target .....	76
Comprehensively Improve Urban Air Quality .....	76
Enhance the Prevention and Control of Industrial Waste Gases .....	77
Strengthen the Prevention and Control of Vehicle Emission Pollution .....	77
<i>TABLE 10 GOVERNMENT TARGETS FOR AIR POLLUTION CONTROL DURING THE PERIOD OF 11<sup>TH</sup> FIVE YEAR PLAN (2006 TO 2010) (MILLION METRIC TONS)</i> .....	78
IMPORTANT AIR POLLUTION CONTROL REGULATIONS .....	78
<i>TABLE 11 IMPORTANT LAWS AND REGULATIONS FOR ENVIRONMENTAL PROTECTION AND CONTROL</i> .....	79

<i>TABLE 11 (CONTINUED)</i> .....	80
ENVIRONMENTAL PROTECTION LAW OF THE PEOPLE'S REPUBLIC OF CHINA .....	80
Environmental Protection Law ... (Continued).....	81
Environmental Protection Law ... (Continued).....	82
LAW FOR PREVENTION AND CONTROL OF AIR POLLUTION REVISED IN 2000 .....	82
GB16297-1996: INTEGRATED EMISSION STANDARDS FOR AIR POLLUTANTS .....	83
POLLUTION PREVENTION TECHNOLOGY POLICY FOR VEHICLE EMISSIONS .....	83
THE PREVENTION AND CURE TECHNOLOGY POLICY OF MOTORCYCLE EXHAUST POLLUTION .....	83
THE PREVENTION AND CURE TECHNOLOGY POLICY OF DIESEL VEHICLE EXHAUST POLLUTION.....	84
GB18176-2007: LIMITS AND MEASUREMENT METHODS FOR EMISSIONS OF POLLUTANTS FROM MOPEDS ON THE RUNNING MODE (CHINA STAGE III).....	84
GB14622-2007 LIMITS AND MEASUREMENT METHODS FOR THE EMISSIONS OF POLLUTANTS FROM MOTORCYCLES ON THE RUNNING MODE (CHINA STAGE III) .....	84
GB18352.1-2001: LIMITS AND MEASUREMENT METHODS FOR POLLUTION EMITTED BY LIGHT-DUTY VEHICLES .....	85
GB 18352.2-2001: LIMITS AND MEASUREMENT METHODS FOR POLLUTION EMITTED BY LIGHT-DUTY VEHICLES .....	85
GB17691-2001: LIMITS AND MEASUREMENT METHODS FOR EXHAUST POLLUTANTS EMITTED BY COMPRESSION IGNITION (CI) VEHICLE ENGINES .....	85
GB13271–2001: EMISSION STANDARD OF AIR POLLUTANTS FOR COAL-BURNING OIL-BURNING GAS- FIRED BOILER .....	86
GB9078-1996: EMISSION STANDARDS FOR AIR POLLUTANTS EMITTED BY INDUSTRIAL KILNS AND FURNACES.....	86
GB13223—2003: EMISSION STANDARD OF AIR POLLUTANTS FOR THERMAL POWER PLANTS.....	86
GB16171-1996: EMISSION STANDARDS FOR AIR POLLUTANTS EMITTED BY COKE OVENS.....	86
GB4915–2004 STANDARD FOR EMISSION OF ATMOSPHERIC POLLUTANT BY CEMENT INDUSTRY .....	86
GB14554-93: EMISSION STANDARDS FOR ODOR POLLUTION .....	87
AIR POLLUTION CONTROLS COVERING END USERS.....	87

SO <sub>2</sub> AND DUST CONTROL .....	87
Coal-fired Power Plants.....	87
Industrial Boiler Users.....	88
VEHICLE EMISSION CONTROLS.....	89
TABLE 12 VEHICLES IN SERVICE AND PRODUCTION IN CHINA, THROUGH 2013 (MILLION UNITS).....	89
CHAPTER SEVEN: AIR POLLUTION CONTROL TECHNOLOGY .....	90
AIR POLLUTION CONTROL TECHNOLOGY .....	90
MAJOR TECHNOLOGY FOR AIR POLLUTION CONTROL .....	91
DESULFURIZATION INDUSTRY .....	91
Wet Scrubbers.....	91
Wet Scrubbers (Continued) .....	92
Spray Dry Scrubbers .....	93
Sorbent Injection Processes.....	93
Sorbent Injection ...(Continued).....	94
Sorbent Injection ...(Continued).....	95
Dry Scrubbers .....	96
Regenerable Processes.....	96
Combined SO <sub>2</sub> /NO <sub>x</sub> Removal Processes .....	97
DUST CONTROL INDUSTRY .....	97
Types of Dust Collectors.....	97
Electrostatic Precipitators (ESP) .....	97
Baghouse Dust Collectors (Fabric Filters) .....	98
Wet Scrubbers.....	99
Inertial Separators .....	100
Unit Collectors .....	100
VEHICLE EMISSION CONTROL INDUSTRY .....	101
CATALYTIC CONVERTER.....	102
NEW AIR POLLUTION CONTROL TECHNOLOGY	
DEVELOPMENTS .....	102
PRIORITY AREAS FOR ENVIRONMENTAL SCIENCE AND TECHNOLOGY INNOVATIONS DURING THE “11 <sup>TH</sup> FIVE YEAR PLAN” PERIOD.....	103
PRIORITY AREAS FOR ENVIRONMENTAL PROTECTION INDUSTRY DURING THE “11 <sup>TH</sup> FIVE YEAR PLAN” PERIOD.....	104
R&D LEADERS IN AIR POLLUTION CONTROL.....	105
TABLE 13 SCIENCE AND TECHNOLOGY AWARDS IN CHINA’S ENVIRONMENTAL PROTECTION INDUSTRY IN 2006 AND 2007 (AIR POLLUTION FIELD) .....	106
TABLE 13 (CONTINUED).....	107
TABLE 13 (CONTINUED).....	108
MAJOR PRODUCTS--AIR POLLUTION CONTROL.....	108
DESULFURIZATION INDUSTRY .....	108

Desulfurization Equipment Used In Coal-fired Power Plant.....	108
Desulfurization ... (Continued) .....	109
<i>TABLE 14 MARKET FOR DESULFURIZATION EQUIPMENT USED IN COAL-FIRED PLANTS, THROUGH 2013 (\$ BILLIONS)</i> .....	110
Desulfurization Equipment Used in Industrial Boilers.....	110
<i>TABLE 15 MARKET FOR DESULFURIZATION DUST COLLECTORS USED IN INDUSTRIAL BOILERS, THROUGH 2013 (\$ BILLIONS)</i> .....	111
DUST CONTROL INDUSTRY .....	111
Electrostatic Precipitators.....	111
Baghouse Dust Collectors .....	112
<i>TABLE 16 DUST COLLECTOR MARKET IN CHINA, THROUGH 2013 (\$ BILLIONS)</i> .....	112
VEHICLE EMISSION CONTROL INDUSTRY .....	112
Vehicle Emission Control ... (Continued) .....	113
Vehicle Emission Control ... (Continued) .....	114
<i>TABLE 17 CATALYTIC CONVERTER MARKET IN CHINA, THROUGH 2013 (\$ BILLIONS)</i> .....	115
CATALOGUE ON THE ENVIRONMENTAL PROTECTION EQUIPMENT (PRODUCTS) ENCOURAGED BY THE STATE (2007 REVISED).....	115
DESULFURIZATION INDUSTRY .....	116
<i>TABLE 18 CATALOGUE ON THE ENVIRONMENTAL PROTECTION EQUIPMENT (PRODUCTS) ENCOURAGED BY THE STATE (2007 REVISED), DESULFURIZATION INDUSTRY</i> .....	116
<i>TABLE 18 (CONTINUED)</i> .....	117
<i>TABLE 18 (CONTINUED)</i> .....	118
<i>TABLE 18 (CONTINUED)</i> .....	119
DUST CONTROL INDUSTRY .....	119
<i>TABLE 19 CATALOGUE ON THE ENVIRONMENTAL PROTECTION EQUIPMENT (PRODUCTS) ENCOURAGED BY THE STATE (2007 REVISED), DUST COLLECTION PRODUCTS</i> .....	119
VEHICLE EMISSION CONTROL INDUSTRY .....	120
<i>TABLE 20 CATALOGUE ON THE ENVIRONMENTAL PROTECTION EQUIPMENT (PRODUCTS) ENCOURAGED BY THE STATE (2007 REVISED), VEHICLE EMISSIONS CONTROL</i> .....	120
CHAPTER EIGHT: WATER POLLUTION CONTROL SUMMARY .....	121
OVERALL WATER POLLUTION CONTROL INDUSTRY TO 2013 .....	121
<i>TABLE 21 CURRENT SALES AND FORECAST TO 2013, WATER POLLUTION CONTROL PRODUCTS AND EQUIPMENT, THROUGH 2013 (\$ BILLIONS)</i> .....	122
PRINCIPAL MARKET FORCES .....	122
WATER POLLUTION CONTROL INDUSTRY DEFINITION .....	123



IMPORTANCE OF THE WATER POLLUTION CONTROL	
INDUSTRY .....	123
CHINA'S WATER RESOURCES .....	123
<i>TABLE 22 WATER RESOURCES IN CHINA, 2007 (CUBIC METERS)</i> .....	124
CHINA'S WATER POLLUTION SITUATION .....	125
Major River Systems .....	125
Lakes and Reservoirs .....	126
Groundwater .....	127
Discharge Amounts of Wastewater and Major Pollutants .....	127
<i>TABLE 23 WATER POLLUTION SITUATION: WASTEWATER</i>	
<i>DISCHARGE VOLUMES, 2005-2007 (BILLIONS OF METRIC TONS)</i> .....	128
<i>TABLE 24 BASIC STATISTICS ON ENVIRONMENTAL</i>	
<i>PROTECTION-WATER POLLUTION, 2004-2006</i> .....	128
WATER POLLUTION CONTROL INDUSTRY HISTORY .....	128
WATER POLLUTION CONTROL ... (CONTINUED) .....	129
<i>TABLE 25 HISTORICAL MARKET FOR WATER POLLUTION</i>	
<i>CONTROL PRODUCTS AND EQUIPMENT, 2006 AND 2007</i>	
<i>(\$ BILLIONS)</i> .....	130
CHAPTER NINE: WATER POLLUTION CONTROL MARKETS .....	131
MARKET SEGMENTATION: WATER POLLUTION CONTROL .....	131
INDUSTRIAL WASTEWATER TREATMENT .....	131
URBAN WASTEWATER TREATMENT .....	131
WATER POLLUTION CONTROL DRIVING FORCES .....	131
WATER POLLUTION CONTROL ... (CONTINUED) .....	132
WATER POLLUTION CONTROL IMPACT ON OTHER INDUSTRIES ...	133
HEALTH IMPACTS OF WATER POLLUTION .....	133
NON-HEALTH IMPACT OF WATER POLLUTION .....	133
Water Scarcity and Pollution .....	133
Crop Loss Due to Wastewater Irrigation .....	134
Fishery Loss .....	134
PARTICIPANTS IN WATER POLLUTION CONTROL .....	134
INDUSTRIAL WASTEWATER TREATMENT .....	135
Market Leaders in Industrial Wastewater Pollution	
Control .....	135
Tianjin Capital Environmental Protection Co., Ltd. ....	135
Hubei Hongcheng General Machinery Co., Ltd. ....	136
Tangshan Environmental Mechanical Engineering	
Co., Ltd. ....	136
CSSC Nanjing Luzhou Machine Co., Ltd. ....	137
Major Foreign Investors in Industrial Wastewater	
Pollution Control .....	138
B-Tohin Machine (Jiangsu) Co., Ltd. ....	138
URBAN WASTEWATER TREATMENT .....	138
Market Leaders in Urban Wastewater Control .....	138

Yixing Huanqiu Water Treatment Equipment Plant.....	138
Hangzhou Hangyang Environmental Protection Equipment Co., Ltd. ....	139
Yangzhou Chenglu Environmental Engineering Co., Ltd.....	140
Hangzhou Xingyuan Filter Press Co., Ltd.....	140
Major Foreign Investors in Urban Wastewater Control.....	141
Tianjin TEMTEX Electric Submersible Pump Co., Ltd. ....	141
Yixing Huadu Huber Environmental Protection Machinery Manufacturing Co., Ltd. ....	141
Shanghai KSB Pump Co., Ltd.....	141
Shangdong Zhanghuang Machinery Industry Co., Ltd. ....	142
INFLUENCES ON THE WATER POLLUTION CONTROL MARKET .....	143
GOVERNMENT INVESTMENT IN THE 10 <sup>TH</sup> FIVE YEAR PERIOD (2001 TO 2005) .....	143
<i>TABLE 26 INVESTMENT FOR WATER POLLUTION CONTROL DURING THE 10<sup>TH</sup> FIVE YEAR PLAN (2001 TO 2005) (RMB BILLIONS)</i> .....	143
GOVERNMENT INVESTMENT IN THE 11 <sup>TH</sup> FIVE YEAR PLAN .....	144
Government Investment ... (Continued) .....	145
<i>TABLE 27 GOVERNMENT INVESTMENT IN THE 11<sup>TH</sup> FIVE YEAR PLAN FOR WATER POLLUTION CONTROL, 2006-2010 (RMB BILLIONS)</i> .....	146
GOVERNMENT WATER POLLUTION CONTROL TARGETS .....	146
ENSURE THE ACHIEVEMENT OF COD REDUCTION TARGET .....	146
ENSURE SAFETY OF DRINKING WATER SOURCES.....	147
FACILITATE THE PREVENTION AND CONTROL OF WATER POLLUTION OF KEY RIVER BASINS.....	148
<i>TABLE 28 GOVERNMENT TARGETS FOR WATER POLLUTION CONTROL DURING THE PERIOD OF 11<sup>TH</sup> FIVE YEAR PLAN (2006 TO 2010)</i> .....	148
IMPORTANT LAWS AND REGULATIONS GOVERNING WATER POLLUTION CONTROL .....	149
<i>TABLE 29 IMPORTANT LAWS AND REGULATIONS FOR WATER POLLUTION CONTROL</i> .....	149
<i>TABLE 29 (CONTINUED)</i> .....	150
<i>TABLE 29 (CONTINUED)</i> .....	151
ENVIRONMENTAL PROTECTION LAW OF THE PEOPLE'S REPUBLIC OF CHINA .....	151

Environmental Protection Law ... (Continued).....	152
LAW FOR PREVENTION AND CONTROL OF WATER	
POLLUTION .....	153
MEASURES ON THE ADMINISTRATION OF POLLUTION	
SOURCES MONITORING .....	154
POLLUTION PREVENTION TECHNOLOGY POLICY FOR	
THE PULP AND PAPER INDUSTRY.....	154
MARINE ENVIRONMENT PROTECTION LAW OF THE	
PEOPLE'S REPUBLIC OF CHINA .....	154
GB 18918-2002 DISCHARGE STANDARD OF POLLUTANTS	
FOR MUNICIPAL WASTEWATER TREATMENT PLANT .....	155
GB3544-2001 DISCHARGE STANDARD OF WATER	
POLLUTANTS FOR PAPER INDUSTRY .....	155
GB15580-95 DISCHARGE STANDARDS FOR WATER	
POLLUTANTS IN THE PHOSPHATE FERTILIZER	
INDUSTRY.....	155
GB15581-95 DISCHARGE STANDARDS FOR WATER	
POLLUTANTS PRODUCED BY CAUSTIC ALKALI IN THE	
POLYVINYL CHLORIDE INDUSTRY.....	155
GB14470.2-2002 DISCHARGE STANDARD FOR WATER	
POLLUTANTS FROM ORDNANCE INDUSTRY	
INITIATING EXPLOSIVE MATERIAL AND RELATIVE	
COMPOSITION .....	155
GB4287-92 DISCHARGE STANDARDS FOR WATER	
POLLUTANTS PRODUCED BY THE TEXTILE DYEING	
AND FINISHING INDUSTRY.....	156
GB13456-92 DISCHARGE STANDARDS FOR WATER	
POLLUTANTS IN THE IRON AND STEEL INDUSTRY.....	156
GB13457-92 DISCHARGE STANDARDS FOR WATER	
POLLUTANTS IN THE MEAT PACKING INDUSTRY.....	156
POLLUTION PREVENTION TECHNOLOGY POLICY FOR	
URBAN WASTEWATER TREATMENT .....	156
WATER POLLUTION CONTROL END USERS .....	156
INDUSTRIAL WASTEWATER TREATMENT .....	157
URBAN WASTEWATER TREATMENT .....	158
CHAPTER TEN: WATER POLLUTION CONTROL TECHNOLOGY .....	159
WATER POLLUTION CONTROL TECHNOLOGY .....	159
MAJOR WATER POLLUTION CONTROL TECHNOLOGY .....	160
PHYSICAL TREATMENT .....	160
CHEMICAL TREATMENT .....	161
BIOLOGICAL TREATMENT .....	162
Preliminary Treatment .....	163
Primary Treatment.....	163
Secondary Treatment .....	164

Sludge Treatment.....	165
Tertiary and Advanced Wastewater Treatment .....	165
NEW TECHNOLOGY DEVELOPMENTS IN WATER POLLUTION	
CONTROL.....	166
Priority Areas for Environmental Science and Technology	
Innovations During the “11 <sup>th</sup> Five Year Plan” Period .....	166
Priority Areas for Environmental Protection Industry	
during the “11 <sup>th</sup> Five Year Plan” Period.....	167
Priority Areas ...(Continued).....	168
R&D LEADERS IN WATER POLLUTION CONTROL.....	169
<i>TABLE 30 SCIENCE AND TECHNOLOGY AWARDS IN CHINA’S</i>	
<i>ENVIRONMENTAL PROTECTION INDUSTRY IN 2006 AND 2007</i>	
<i>(WATER POLLUTION FIELD).....</i>	<i>170</i>
<i>TABLE 30 (CONTINUED).....</i>	<i>171</i>
<i>TABLE 30 (CONTINUED).....</i>	<i>172</i>
CHAPTER ELEVEN: CATALOGUE ON THE ENVIRONMENTAL	
PROTECTION EQUIPMENT (PRODUCTS) ENCOURAGED BY THE	
STATE (2007 REVISED) .....	173
CATALOGUE ON THE ENVIRONMENTAL PROTECTION	
EQUIPMENT (PRODUCTS) ENCOURAGED BY THE STATE	
(2007 REVISED).....	173
<i>TABLE 31 CATALOGUE ON THE ENVIRONMENTAL PROTECTION</i>	
<i>EQUIPMENT (PRODUCTS) CURRENTLY ENCOURAGED BY THE</i>	
<i>STATE TO DEVELOP (2007 REVISED).....</i>	<i>174</i>
<i>TABLE 31 (CONTINUED).....</i>	<i>175</i>
<i>TABLE 31 (CONTINUED).....</i>	<i>176</i>
<i>TABLE 31 (CONTINUED).....</i>	<i>177</i>
CHAPTER TWELVE: MUNICIPAL SOLID WASTE (MSW) POLLUTION	
CONTROL SUMMARY AND OVERVIEW .....	178
<i>TABLE 32 BASIC STATISTICS ON ENVIRONMENTAL PROTECTION-</i>	
<i>SOLID WASTE, 2004-2007 (10,000 METRIC TONS).....</i>	<i>178</i>
THE OVERALL MSW POLLUTION CONTROL INDUSTRY TO 2013.....	178
<i>TABLE 33 PROJECTED MARKET FOR MSW</i>	
<i>PRODUCTS/EQUIPMENT, THROUGH 2013 (\$ BILLIONS).....</i>	<i>179</i>
PRINCIPAL MARKET FORCES IN MSW POLLUTION CONTROL .....	179
DEFINITION OF MUNICIPAL SOLID WASTE POLLUTION	
CONTROL INDUSTRY .....	180
IMPORTANCE OF THE MUNICIPAL SOLID WASTE POLLUTION	
CONTROL INDUSTRY .....	180
CHINA’S LAND RESOURCES .....	180
<i>TABLE 34 LAND RESOURCES IN CHINA, 2007 (HECTARES) .....</i>	<i>181</i>
CHINA’S LAND POLLUTION SITUATION .....	181

TABLE 35 COLLECTION AND TRANSPORTATION VOLUME FOR MUNICIPAL SOLID WASTE, THROUGH 2013 (MILLION METRIC TONS).....	182
MSW POLLUTION CONTROL INDUSTRY HISTORY.....	182
TABLE 36 MSW NONHAZARDOUS TREATMENT FACILITIES BY REGION IN CHINA, 2006.....	183
TABLE 36 (CONTINUED).....	184
TABLE 37 GOVERNMENT-APPROVED LANDFILL GAS UTILIZATION CDM PROJECTS IN CHINA.....	184
TABLE 37 (CONTINUED).....	185
TABLE 38 HISTORICAL MSW TREATMENT PRODUCTS AND EQUIPMENT MARKET, 2006 AND 2007 (\$ MILLIONS).....	185
CHAPTER THIRTEEN: LAND POLLUTION CONTROL MARKETS.....	186
LAND POLLUTION CONTROL MARKET SEGMENTATION.....	186
MSW COLLECTION AND TRANSFER.....	186
MSW TREATMENT AND DISPOSAL.....	186
MSW COMPREHENSIVE RECYCLING.....	186
DRIVING FORCES IN MSW POLLUTION CONTROL.....	187
MSW POLLUTION CONTROL IMPACT ON OTHER INDUSTRIES.....	187
PARTICIPANTS IN MSW POLLUTION CONTROL.....	188
Market Leaders in MSW Pollution Control.....	188
Eguard Resources Development Co. Ltd. ....	188
Wuxi Huaguang Boiler Co., Ltd. ....	189
Tianjin Sweeper Ace Special Automobile Co., Ltd. ....	189
Shanghai Tongji FARUN Environmental Sanitation Equipment and Engineering Co., Ltd. ....	190
Changzhou Lucky Environmental Protection Equipment Engineering Co., Ltd. ....	191
Beijing Novel Environment Protection Co., Ltd. ....	192
Fujian Fengquan Environmental Protection Company.....	192
Hangzhou Jinjiang Environmental Protection Energy Co., Ltd.....	193
Major Foreign Investors in MSW Pollution Control.....	194
Nanjing Chenguang Morita Environmental Protection Science and Technology Co. ....	194
INFLUENCES ON THE MSW POLLUTION CONTROL MARKET.....	195
GOVERNMENT INVESTMENT IN THE 10 <sup>TH</sup> FIVE YEAR PERIOD (2001 TO 2005).....	195
TABLE 39 GOVERNMENT INVESTMENT FOR SOLID WASTE POLLUTION CONTROL DURING THE 10 <sup>TH</sup> FIVE YEAR PLAN (2001 TO 2005) (\$ BILLIONS).....	195

GOVERNMENT INVESTMENT IN THE 11 <sup>TH</sup> FIVE YEAR PLAN .....	196
Government Investment ... (Continued) .....	197
<i>TABLE 40 GOVERNMENT INVESTMENT IN THE 11TH FIVE YEAR PLAN FOR SOLID WASTE POLLUTION CONTROL, 2006-2010 (\$ BILLIONS)</i> .....	198
GOVERNMENT MUNICIPAL SOLID WASTE POLLUTION CONTROL TARGETS .....	198
<i>TABLE 41 GOVERNMENT TARGETS FOR INDUSTRIAL SOLID WASTE CONTROL DURING THE PERIOD OF 11<sup>TH</sup> FIVE YEAR PLAN (2006 TO 2010) (%)</i> .....	199
IMPORTANT LAWS AND REGULATIONS FOR MSW POLLUTION CONTROL.....	199
<i>TABLE 42 IMPORTANT LAWS AND REGULATIONS FOR MSW POLLUTION CONTROL</i> .....	200
<i>TABLE 42 (CONTINUED)</i> .....	201
<i>TABLE 42 (CONTINUED)</i> .....	202
ENVIRONMENTAL PROTECTION LAWS OF THE PEOPLE'S REPUBLIC OF CHINA .....	202
Environmental Protection ... (Continued).....	203
LAW FOR PREVENTION AND CONTROL OF ENVIRONMENTAL POLLUTION FROM SOLID WASTES.....	204
POLLUTION PREVENTION TECHNOLOGY POLICY FOR MUNICIPAL SOLID WASTE TREATMENT.....	204
LAW OF THE PEOPLE'S REPUBLIC OF CHINA ON PREVENTION AND CONTROL OF ENVIRONMENTAL POLLUTION BY SOLID WASTE .....	205
ADMINISTRATIVE MEASURES FOR MUNICIPAL SOLID WASTE .....	205
GB 18485-2001 STANDARD FOR POLLUTION CONTROL ON THE MUNICIPAL SOLID WASTE INCINERATION.....	205
INTERIM PROVISIONS ON THE ADMINISTRATION OF ENVIRONMENTAL PROTECTION OF WASTE IMPORTS.....	205
REGULATIONS OF THE PEOPLE'S REPUBLIC OF CHINA ON CONTROL OVER DUMPING OF WASTES IN THE OCEAN.....	205
GB5085.1-2007 IDENTIFICATION STANDARDS FOR HAZARDOUS WASTES- IDENTIFICATION FOR CORROSIVITY .....	206
GB18485-2001 STANDARD FOR POLLUTION CONTROL ON THE MUNICIPAL SOLID WASTE INCINERATION.....	206
GB18597-2001 STANDARD FOR POLLUTION CONTROL ON HAZARDOUS WASTE STORAGE .....	206

GB8172-1987 CONTROL STANDARDS FOR AGRICULTURAL USE OF MUNICIPAL SOLID WASTE .....	207
GB16889-2008 STANDARD FOR POLLUTION CONTROL ON THE LANDFILL SITE OF MUNICIPAL SOLID WASTE .....	207
GB/T18772-2002 ENVIRONMENTAL MONITORING TECHNOLOGY STANDARDS FOR MUNICIPAL SOLID WASTE LANDFILL SITES .....	207
GB/T19095-2003 THE CLASSIFICATION SIGNS OF MUNICIPAL DOMESTIC WASTE.....	207
GB50337-2003 MUNICIPAL ENVIRONMENTAL SANITARY FACILITIES PLANNING CRITERION .....	208
GB19217-2003 TECHNICAL STANDARD FOR MEDICAL WASTE TRANSPORT VEHICLE .....	208
GB19218-2003 TECHNICAL STANDARD FOR MEDICAL WASTE INCINERATOR .....	208
END USERS OF SOLID WASTE POLLUTION CONTROL.....	208
MUNICIPAL SOLID WASTE:.....	208
INDUSTRIAL SOLID WASTE: .....	209
HAZARDOUS WASTE.....	209
CHAPTER FOURTEEN: MSW POLLUTION CONTROL TECHNOLOGY .....	210
MAJOR TECHNOLOGIES FOR MSW POLLUTION CONTROL .....	210
MSW REDUCTION.....	211
MSW RECYCLING UTILIZATION .....	211
Technologies.....	211
MSW Collection and Transfer .....	211
MSW Collection and Transfer (Continued) .....	212
MSW Recycling .....	213
NONHAZARDOUS MSW TREATMENT AND DISPOSAL TECHNOLOGIES .....	214
Landfill.....	214
Composting .....	215
Incineration.....	216
<i>TABLE 43 MSW TREATMENT TECHNOLOGIES IN CHINA, 2007</i> .....	217
NEW TECHNOLOGY DEVELOPMENT FOR MSW POLLUTION CONTROL.....	218
PRIORITY AREAS FOR ENVIRONMENTAL SCIENCE AND TECHNOLOGY INNOVATIONS DURING THE “11 <sup>TH</sup> FIVE YEAR PLAN” PERIOD .....	218
Priority Areas for ...(Continued).....	219
PRIORITY AREAS FOR ENVIRONMENTAL PROTECTION INDUSTRY DURING THE “11 <sup>TH</sup> FIVE YEAR PLAN” PERIOD .....	220
R&D LEADERS—MSW POLLUTION CONTROL.....	221

<i>TABLE 44 SCIENCE AND TECHNOLOGY AWARDS IN CHINA'S ENVIRONMENTAL PROTECTION INDUSTRY IN 2006 AND 2007 (MSW POLLUTION FIELD)</i> .....	222
<i>TABLE 44 (CONTINUED)</i> .....	223
CHAPTER FIFTEEN: PRODUCTS FOR MSW POLLUTION CONTROL .....	224
MAJOR PRODUCTS AND EQUIPMENT FOR MSW POLLUTION CONTROL.....	224
MUNICIPAL SOLID WASTE COLLECTION AND TRANSFER EQUIPMENT .....	224
LANDFILL-RELATED EQUIPMENT AND MATERIALS.....	224
INCINERATION EQUIPMENT.....	225
COMPOSTING TECHNOLOGY AND RELATED EQUIPMENT ....	225
CATALOGUE ON THE ENVIRONMENTAL PROTECTION EQUIPMENT (PRODUCTS) ENCOURAGED BY THE STATE (2007 REVISED).....	226
<i>TABLE 45 CATALOGUE ON THE ENVIRONMENTAL PROTECTION EQUIPMENT (PRODUCTS) ENCOURAGED BY THE STATE (2007 REVISED)</i> .....	227
<i>TABLE 45 (CONTINUED)</i> .....	228
<i>TABLE 45 (CONTINUED)</i> .....	229
CHAPTER SIXTEEN: INTERNATIONAL ASPECTS FOR CHINESE ENVIRONMENTAL PROTECTION INDUSTRY .....	230
CHINESE 11 <sup>TH</sup> FIVE YEAR PLAN ON UTILIZATION OF FOREIGN INVESTMENTS .....	230
CHINESE 11 <sup>TH</sup> FIVE YEAR PLAN...(CONTINUED) .....	231
MAJOR TASKS OF CHINA'S UTILIZATION OF FOREIGN INVESTMENTS DURING THE PERIOD OF THE 11 <sup>TH</sup> FIVE YEAR PLAN (RELATED TO ENVIRONMENTAL PROTECTION INDUSTRY).....	232
Guiding the Optimization and Upgrading of the Industrial Structure of Foreign Investments.....	232
Promoting the Building-up of a Conservation-minded and Environmentally Friendly Society.....	233
INDUSTRY CATALOGUES FOR GUIDING FOREIGN INVESTMENT (REVISED 2007).....	234
Industry Catalogues ...(Continued) .....	235
Industry Catalogues ...(Continued) .....	236
Industry Catalogues ...(Continued) .....	237
Industry Catalogues ...(Continued) .....	238
INTERNATIONAL COOPERATION IN ENVIRONMENTAL PROTECTION .....	239
INTERNATIONAL COOPERATION...(CONTINUED).....	240
ASIAN DEVELOPMENT BANK (ADB) .....	241



Asian Development Bank ... (Continued).....	242
<i>TABLE 46 CUMULATIVE ADB LENDING TO CHINA, 2007</i> .....	243
THE WORLD BANK (WB) .....	243
<i>TABLE 47 WORLD BANK LENDING TO CHINA (\$ MILLIONS)</i> .....	244
<i>TABLE 48 WORLD BANK LENDING TO CHINA, BY SECTOR</i> (\$ MILLIONS).....	245
UNITED NATIONS .....	245
United Nations (Continued).....	246
United Nations (Continued).....	247
IMPORTS AND EXPORTS FOR CHINESE ENVIRONMENTAL PROTECTION INDUSTRY .....	248
AIR POLLUTION CONTROL EQUIPMENT .....	248
<i>TABLE 49 ESTIMATED VALUE OF IMPORTS AND EXPORTS OF AIR POLLUTION CONTROL PRODUCTS AND EQUIPMENT, THROUGH 2013 (\$ MILLIONS)</i> .....	248
<i>FIGURE 1 ESTIMATED VALUE OF IMPORTS AND EXPORTS OF AIR POLLUTION CONTROL PRODUCTS AND EQUIPMENT, 2006-2013</i> (\$ MILLIONS).....	249
WATER POLLUTION CONTROL .....	249
<i>TABLE 50 ESTIMATED VALUE OF IMPORTS AND EXPORTS OF WASTEWATER TREATMENT PRODUCTS AND EQUIPMENT, THROUGH 2013 (\$ MILLIONS)</i> .....	250
<i>FIGURE 2 ESTIMATED VALUE OF IMPORTS AND EXPORTS OF WASTEWATER TREATMENT PRODUCTS AND EQUIPMENT, 2006- 2013 (\$ MILLIONS)</i> .....	250
MSW POLLUTION CONTROL.....	251
<i>TABLE 51 ESTIMATED VALUE OF IMPORTS AND EXPORTS OF MSW TREATMENT PRODUCTS AND EQUIPMENT, THROUGH 2013 (\$ MILLIONS)</i> .....	251
<i>FIGURE 3 ESTIMATED VALUE OF IMPORTS AND EXPORTS OF MSW TREATMENT PRODUCTS AND EQUIPMENT, 2006-2013</i> (\$ MILLIONS).....	252
MARKET ACCESS FOR CHINESE ENVIRONMENTAL PROTECTION INDUSTRY .....	252
AIR POLLUTION CONTROL .....	252
WATER POLLUTION CONTROL .....	253
WATER AND WASTEWATER TREATMENT TECHNOLOGY AND EQUIPMENT SALES.....	253
OTHER ENTRY MODES INVOLVED WITH INVESTMENT .....	254
MSW POLLUTION CONTROL.....	255
SOLID WASTE TREATMENT TECHNOLOGY AND EQUIPMENT SALES.....	255
OTHER ENTRY MODE THAT REQUIRES INVESTMENT.....	255
Other Entry Mode that ... (Continued) .....	256

