
Description:
The power sector is composed of the entities which generate, transport and distribute electricity to consumers. The generating sector consists of the electrical utility industry, other utilities, industry and commerce which generate and consume electricity.

The “wires” industry consist of the transmission and distribution companies which transport and distribute the electricity from generators to consumers. Altogether, the power sector is colossal, the global infrastructure is enormous and the financial resources required correspondingly large.

41% of final electricity consumption is by industry, 23% by commerce and 28% is residential and the balance by public services and railways.

Contents:

Executive Summary

The Power Sector Report

The Structure of this Report

1. Introduction to the Power Sector
   The Scale of the Power Sector
   The Participants in the Power Sector

2. The Elements of An Electrical Network

3. Utility Sectors

4. The Use of Electricity By Sector

5. The Historical Development of Transmission And Distribution Networks

6. Transmission And Distribution Line Lengths By Country

7. Annual Demand for T&D Lines, Additions And Replacement

8. Distributed Power

9. Network Voltages
   Global Transmission And Distribution Voltages
   Europe
   Cis
   Middle East
   North Africa
   Sub-Saharan Africa
   Asia Pacific
   North America
   Latin America

10. Capital Expenditure

11. T&D Capex

12. Regional And National Equipment Markets
   T&D Plant, United States
   T&D Plant, Europe
13. Sales of T&D Equipment By Region
The Total T&D Equipment Market
Vendors
Transformers
Switchgear
Circuit Breakers
Circuit Protectors
Surge Arresters
Distribution Panels
Fusegear
Switches
Disconnectors
Protection Relays
Lightning Arresters
Isolators
Energy Cable - Insulated And Uninsulated Conductors
Insulators And Bushings, Spacers And Dampers
Spacers And Dampers
Hvdc
Ac Filters for Hvdc
Steel Towers
Poles of Wood, Concrete, Steel And Composite
Pole-Top Assemblies
Meters
Utility Automation

14. The Value Chain - from Materials to Capex
The Value Chain at 6 Levels

15. Price Trends And Factors Driving Prices
Price Trends
Ppi - Producer Price Index
Industry
Production Capacity
Manufacturing Input Cost Composition

16. Land-Based Underground Cables - Hv, Mv & Lv

17. The Submarine Cable Market- Offshore Wind Power, Oil & Gas

18. Advanced Technology, Superconductors

19. N-1 Standard, N-2, 2N, Redundancy And Replacement
Network Failure
Transformer Failure
Industrial Reliability
Network Reliability
N-1 And the Networks
Contingency Planning for Network Failure
Electricity Distribution

20. Electrification
The Impact of Increased Electrification On Future Markets
Electrical Goods And Aspirations: the Household Electrification Wheel
Factors Driving the Increase in Numbers of Electrical Connections

21. Currents, Circuits And Phases
Currents - Ac And Dc
Circuits

Methodology
Market Sizing And Bottom Up Forecasting
The Sanity Check And Validation

Figures

Figure 1: the Uk Electrical Power Transmission And Distribution System
Figure 2: the Global Utility Landscape
Figure 3: Industry Uses of Different Energy Sources in the Us
Figure 4: Energy Use By Type of Industry in the Us (All Types of Energy)
Figure 5: % of Total Machine Drive Electricity Used in Manufacturing in the Us
Figure 6: Machine Drive Electricity Use As a % of Total Delivered Energy Use By Each Industry in the Us
Figure 7: World Transmission And Distribution Lines N Circuit Km, Development from 1900 to 2015
Figure 8: Transmission Line Lengths for Major Countries, 1900 to 2015
Figure 9: Distribution Line Lengths for Major Countries, 1900 to 2015
Figure 10: Installed Transmission Lines And Annual Additions '000 Km, 1900 to 2050
Figure 11: Installed Distribution Lines And Annual Additions '000 Km, 1900 to 2050
Figure 12: Annual Demand, New And Replacement Demand for Transmission Lines in '000 Km, 1900-20
Figure 13: New And Replacement Demand for Distribution Lines in '000 Km, 1900 to 2050
Figure 14: Composition of the Retail Cost of Electricity
Figure 15: Global Transmission Lines By Voltage, Km, 2014
Figure 16: Global Distribution Lines By Voltage, Km, 2014
Figure 17: Distribution Voltages in Europe (Eu 27)
Figure 18: Total Global Capital Expenditure On Generation, Transmission And Distribution, Nominal $ Billion 2000 to 2020
Figure 19: Comparison of Expenditure On Generation, Transmission And Distribution in Real ($2015) And Nominal Values, 2000 to 2020
Figure 20: Global Capital Expenditure Broken By Generation, Transmission And Distribution, Nominal $ Billion, 2000 to 2020
Figure 21: Total Capex in Generation, Transmission & Distribution 200-2010 Compared With 2010-20
Figure 22: Total Capital Expenditure On Generation, Transmission And Distribution By Region in 2016
Figure 23: Total Capital Expenditure On Generation, Transmission And Distribution By Region And Year, Nominal $ Billion, 2000, 2010 And 2020
Figure 24: Composition of Global Capital Expenditure Generation, Transmission And Distribution, 2015
Figure 25: Where Circuit Breakers Are Used in Electricity Systems
Figure 26: Commodity Price Index 1996 to 2016
Figure 27: Industrial Metals Prices 2007 to 2016
Figure 28: Labour Compensation Cost, Including Direct Pay, Social Insurance Expenditures, And Labour-Related Taxes (Us = 100).
Figure 29: Labour Costs Including Wages And Salaries, Social Insurance And Labour-Related Taxes
Figure 30: Minimum Wages in China in Yuan Per Month 1995 to 2012
Figure 31: Underground Cable As a Percent of the Total Network in European Countries
Figure 32: Underground Cable As a Percent of the Total Network in Cis Countries
Figure 33: Underground Cable As a Percent of the Total Network in Mena Countries
Figure 34: Underground Cable As a Percent of the Total Network in Asia Pacific Countries
Figure 35: Underground Cable As a Percent of the Total Network in Pacific Countries
Figure 36: Percent of Population in Urban Areas, 1960-2010 By Region
Figure 37: Market Shares of Different Offshore Segments
Figure 38: Undersea Communications Cables Linking the World
Figure 39: A High Voltage Substation With Four Transformers, Three Active And One Redundant
Figure 40: Additions of Electrified Households Between 2015 And 2050 By Region
Figure 41: Countries With Greatest Population Declines By 2050
Figure 42: The Household Electrification Wheel
Figure 43: Population Growth % in Each Decade By Region
Figure 44: Average Household Size, World, 1900 to 2050
Figure 45: World Electrification - % of Households With Electricity, 1900-2050
Figure 46: World Electrification - Number of Households With And Without Electricity, 1900-2050
Figure 47: Share of People Without Electricity Access For Developing Countries, 2008
Figure 48: Regional Totals of Electrified Households 2010 to 2050
Figure 49: Selected Major Countries - % of Households With Electricity, 1900-2050
Figure 50: Single Phase Power
Figure 51: Three Phase Power
Figure 52: The Composition of Annual Demand for Capacity, New Plus Replacement

Tables
Table 1: Ownership of Assets in the Power Sector By Owner Type
Table 2: The World's Electrical Utility Landscape
Table 3: Transmission Line Lengths in Ckm, 1980 to 2030, Europe
Table 4: Distribution Line Lengths in Ckm, 1980 to 2030, Europe
Table 5: Transmission Line Lengths in Ckm, 1980 to 2030, Cis
Table 6: Distribution Line Lengths in Ckm, 1980 to 2030, Cis
Table 7: Transmission Line Lengths in Ckm, 1980 to 2030, Mena
Table 8: Distribution Line Lengths in Ckm, 1980 to 2030, Mena
Table 9: Transmission Line Lengths in Ckm, 1980 to 2030, Sub-Saharan Africa
Table 10: Distribution Line Lengths in Ckm, 1980 to 2030, Sub-Saharan Africa
Table 11: Transmission Line Lengths in Ckm, 1980 to 2030, Asia
Table 12: Distribution Line Lengths in Ckm, 1980 to 2030, Asia
Table 13: Transmission Line Lengths in Ckm, 1980 to 2030, Pacific
Table 14: Distribution Line Lengths in Ckm, 1980 to 2030, Pacific
Table 15: Transmission Line Lengths in Ckm, 1980 to 2030, North America
Table 16: Distribution Line Lengths in Ckm, 1980 to 2030, North America
Table 17: Transmission Line Lengths in Ckm, 1980 to 2030, Latin America
Table 18: Distribution Line Lengths in Ckm, 1980 to 2030, Latin America
Table 19: New And Replacement Demand for Transmission Lines in Ckm, 2016 to 2035, World
Table 20: Total Demand for Transmission Lines in Ckm, 2016 to 2050, World
Table 21: New And Replacement Demand for Distribution Lines in Ckm, 2016 to 2035, World
Table 22: Total Demand for Distribution Lines in Ckm, 2016 to 2050, World
Table 23: New And Replacement Demand for Transmission Lines in 5 Year Segments By Country in Km, 2015 to 2030, Europe
Table 24: Total New And Replacement Demand for Transmission Lines in 5 Year Segments By Country in Km And % of Replacement, 2015 to 2050, Europe
Table 25: New And Replacement Demand for Distribution Lines in 5 Year Segments By Country in Km, 2015 to 2030, Europe
Table 26: Total New And Replacement Demand for Distribution Lines in 5 Year Segments By Country in Km And % of Replacement, 2015 to 2050, Europe
Table 27: New And Replacement Demand for Transmission Lines in 5 Year Segments By Country in Km, 2015 to 2030, Cis
Table 28: Total New And Replacement Demand for Transmission Lines in 5 Year Segments By Country in Km And % of Replacement, 2015 to 2050, Cis
Table 29: New And Replacement Demand for Distribution Lines in 5 Year Segments By Country in Km, 2015 to 2030, Cis
Table 30: Total New And Replacement Demand for Distribution Lines in 5 Year Segments By Country in Km And % of Replacement, 2015 to 2050, Cis
Table 31: New And Replacement Demand for Transmission Lines in 5 Year Segments By Country in Km, 2015 to 2030, Mena
Table 32: Total New And Replacement Demand for Transmission Lines in 5 Year Segments By Country in Km And % of Replacement, 2015 to 2050, Mena
Table 33: New And Replacement Demand for Distribution Lines in 5 Year Segments By Country in Km, 2015 to 2030, Mena
Table 34: Total New And Replacement Demand for Distribution Lines in 5 Year Segments By Country in Km And % of Replacement, 2015 to 2050, Mena
Table 35: New And Replacement Demand for Transmission Lines in 5 Year Segments By Country in Km, 2015 to 2030, Mena
to 2030, Sub-Saharan Africa
Table 36: Total New And Replacement Demand for Transmission Lines in 5 Year Segments By Country in Km And % of Replacement, 2015 to 2050, Sub-Saharan Africa
Table 37: New And Replacement Demand for Distribution Lines in 5 Year Segments By Country in Km, 2015 to 2030, Sub-Saharan Africa
Table 38: Total New And Replacement Demand for Distribution Lines in 5 Year Segments By Country in Km And % of Replacement, 2015 to 2050, Sub-Saharan Africa
Table 39: New And Replacement Demand for Transmission Lines in 5 Year Segments By Country in Km, 2015 to 2030, Asia
Table 40: Total New And Replacement Demand for Transmission Lines in 5 Year Segments By Country in Km And % of Replacement, 2015 to 2050, Asia
Table 41: New And Replacement Demand for Distribution Lines in 5 Year Segments By Country in Km, 2015 to 2030, Asia
Table 42: Total New And Replacement Demand for Distribution Lines in 5 Year Segments By Country in Km And % of Replacement, 2015 to 2050, Asia
Table 43: New And Replacement Demand for Transmission Lines in 5 Year Segments By Country in Km, 2015 to 2030, Pacific
Table 44: Total New And Replacement Demand for Transmission Lines in 5 Year Segments By Country in Km And % of Replacement, 2015 to 2050, Pacific
Table 45: New And Replacement Demand for Distribution Lines in 5 Year Segments By Country in Km, 2015 to 2030, Pacific
Table 46: Total New And Replacement Demand for Distribution Lines in 5 Year Segments By Country in Km And % of Replacement, 2015 to 2050, Pacific
Table 47: New And Replacement Demand for Transmission Lines in 5 Year Segments By Country in Km, 2015 to 2030, North America
Table 48: Total New And Replacement Demand for Transmission Lines in 5 Year Segments By Country in Km And % of Replacement, 2015 to 2050, North America
Table 49: New And Replacement Demand for Distribution Lines in 5 Year Segments By Country in Km, 2015 to 2030, North America
Table 50: Total New And Replacement Demand for Distribution Lines in 5 Year Segments By Country in Km And % of Replacement, 2015 to 2050, North America
Table 51: New And Replacement Demand for Transmission Lines in 5 Year Segments By Country in Km, 2015 to 2030, Latin America
Table 52: Total New And Replacement Demand for Transmission Lines in 5 Year Segments By Country in Km And % of Replacement, 2015 to 2050, Latin America
Table 53: New And Replacement Demand for Distribution Lines in 5 Year Segments By Country in Km, 2015 to 2030, the Americas
Table 54: Total New And Replacement Demand for Distribution Lines in 5 Year Segments By Country in Km And % of Replacement, 2015 to 2050, Americas
Table 55: Global Transmission Lines By Voltage, Km, 2014
Table 56: Global Distribution Lines By Voltage, Km, 2014
Table 57: Albania Transmission And Distribution
Table 58: Austria Transmission And Distribution
Table 59: Baltics Transmission And Distribution
Table 60: Belgium Transmission And Distribution
Table 61: Bosnia & Herzegovina Transmission And Distribution
Table 62: Bulgaria Transmission And Distribution
Table 63: Croatia Transmission And Distribution
Table 64: Cyprus Transmission And Distribution
Table 65: Czech Republic Transmission And Distribution
Table 66: Denmark Transmission And Distribution
Table 67: Finland Transmission And Distribution
Table 68: France Transmission And Distribution
Table 69: Germany Transmission And Distribution
Table 70: Greece Transmission And Distribution
Table 71: Hungary Transmission And Distribution
Table 72: Iceland Transmission And Distribution
Table 73: Ireland Transmission And Distribution
Table 74: Italy Transmission And Distribution
Table 75: Luxembourg Transmission And Distribution
Table 76: Macedonia Transmission And Distribution
Table 77: Malta Transmission And Distribution
Table 78: Netherlands Transmission And Distribution
Table 144: Nigeria Transmission And Distribution
Table 145: Rwanda Transmission
Table 146: Senegal Transmission And Distribution
Table 147: Seychelles Transmission
Table 148: South Africa Transmission And Distribution
Table 149: Tanzania Transmission
Table 150: Togo Distribution
Table 151: Uganda Transmission And Distribution
Table 152: Zambia Transmission And Distribution
Table 153: Zimbabwe Transmission And Distribution
Table 154: Afghanistan Transmission And Distribution
Table 155: Bangladesh Transmission And Distribution
Table 156: Bhutan Transmission And Distribution
Table 157: Cambodia Transmission And Distribution
Table 158: China Transmission And Distribution
Table 159: India Transmission And Distribution
Table 160: Indonesia Transmission And Distribution
Table 161: Japan Transmission And Distribution
Table 162: South Korea Transmission And Distribution
Table 163: Laos Transmission And Distribution
Table 164: Malaysia Transmission And Distribution
Table 165: Maldives Transmission And Distribution
Table 166: Myanmar Transmission And Distribution
Table 167: Nepal Transmission
Table 168: Pakistan Transmission And Distribution
Table 169: Philippines Transmission And Distribution
Table 170: Sri Lanka Transmission And Distribution
Table 171: Singapore Transmission And Distribution
Table 172: Taiwan Transmission And Distribution
Table 173: Thailand Transmission And Distribution
Table 174: Vietnam Transmission And Distribution
Table 175: United States Transmission And Distribution
Table 176: Canada Transmission
Table 177: Mexico Transmission And Distribution
Table 178: Antigua Transmission And Distribution
Table 179: Argentina Transmission And Distribution
Table 180: Bahamas Transmission And Distribution
Table 181: Bolivia Transmission
Table 182: Brazil Transmission And Distribution
Table 183: Cayman Islands Distribution
Table 184: Chile Transmission
Table 185: Columbia Transmission
Table 186: Costa Rica Transmission And Distribution
Table 187: Dominican Republic Transmission
Table 188: Ecuador Transmission
Table 189: El Salvador Transmission And Distribution
Table 190: Guatemala Transmission
Table 191: Jamaica Transmission And Distribution
Table 192: Nicaragua Transmission And Distribution
Table 193: Panama Transmission And Distribution
Table 194: Paraguay Transmission And Distribution
Table 195: Peru Transmission
Table 196: Puerto Rico Transmission And Distribution
Table 197: Uruguay Transmission
Table 198: Venezuela Transmission
Table 199: World - T&D Capex By Technology, Nominal $ Million, 2000 to 2020
Table 200: Usa - T&D Capex, Nominal $ Million, 2000 to 2020
Table 201: Europe - T&D Capex, Nominal $ Million, 2000 to 2020
Table 202: France - T&D Capex, Nominal $ Million, 2000 to 2020
Table 203: Germany - T&D Capex, Nominal $ Million, 2000 to 2020
Table 204: Italy - T&D Capex, Nominal $ Million, 2000 to 2020
Table 205: Spain - T&D Capex, Nominal $ Million, 2000 to 2020
Table 206: United Kingdom - T&D Capex, Nominal $ Million, 2000 to 2020
| Table 207: Cis - T&D Capex, Nominal $ Million, 2000 to 2020 |
| Table 208: Russia- T&D Capex, Nominal $ Million, 2000 to 2020 |
| Table 209: Asia Pacific - T&D Capex, Nominal $ Million, 2000 to 2020 |
| Table 210: Japan - T&D Capex, Nominal $ Million, 2000 to 2020 |
| Table 211: China - T&D Capex, Nominal $ Million, 2000 to 2020 |
| Table 212: India - T&D Capex, Nominal $ Million, 2000 to 2020 |
| Table 213: Southeast Asia - T&D Capex, Nominal $ Million, 2000 to 2020 |
| Table 214: Middle East - T&D Capex, Nominal $ Million, 2000 to 2020 |
| Table 215: Africa - T&D Capex, Nominal $ Million, 2000 to 2020 |
| Table 216: Lac - T&D Capex, Nominal $ Million, 2000 to 2020 |
| Table 217: Brazil - T&D Capex, Nominal $ Million, 2000 to 2020 |
| Table 218: Global T&D Equipment Sales By Category in $ Million, 2000 to 2020 |
| Table 219: Transmission Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, World, 2000-20 |
| Table 220: Distribution Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, World, 2000-20 |
| Table 221: Transmission Equipment Cost at Purchase Price in Nominal $ Million, World, 2000-20 |
| Table 222: Distribution Equipment Cost at Purchase Price in Nominal $ Million, World, 2000-20 |
| Table 223: Transmission Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Usa, 2000-20 |
| Table 224: Distribution Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Usa, 2000-20 |
| Table 225: Transmission Equipment Cost at Purchase Price in Nominal $ Million, Usa, 2000-20 |
| Table 226: Distribution Equipment Cost at Purchase Price in Nominal $ Million, Usa, 2000-20 |
| Table 227: Transmission Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Europe, 2000-20 |
| Table 228: Distribution Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Europe, 2000-20 |
| Table 229: Transmission Equipment Cost at Purchase Price in Nominal $ Million, Europe, 2000-20 |
| Table 230: Distribution Equipment Cost at Purchase Price in Nominal $ Million, Europe, 2000-20 |
| Table 231: Transmission Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, France, 2000-20 |
| Table 232: Distribution Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, France, 2000-20 |
| Table 233: Transmission Equipment Cost at Purchase Price in Nominal $ Million, France, 2000-20 |
| Table 234: Distribution Equipment Cost at Purchase Price in Nominal $ Million, France, 2000-20 |
| Table 235: Transmission Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Germany, 2000-20 |
| Table 236: Distribution Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Germany, 2000-20 |
| Table 237: Transmission Equipment Cost at Purchase Price in Nominal $ Million, Germany, 2000-20 |
| Table 238: Distribution Equipment Cost at Purchase Price in Nominal $ Million, Germany, 2000-20 |
| Table 239: Transmission Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Italy, 2000-20 |
| Table 240: Distribution Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Italy, 2000-20 |
| Table 241: Transmission Equipment Cost at Purchase Price in Nominal $ Million, Italy, 2000-20 |
| Table 242: Distribution Equipment Cost at Purchase Price in Nominal $ Million, Italy, 2000-20 |
| Table 243: Transmission Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Spain, 2000-20 |
| Table 244: Distribution Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Spain, 2000-20 |
| Table 245: Transmission Equipment Cost at Purchase Price in Nominal $ Million, Spain, 2000-20 |
| Table 246: Distribution Equipment Cost at Purchase Price in Nominal $ Million, Spain, 2000-20 |
| Table 247: Transmission Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Uk, 2000-20 |
| Table 248: Distribution Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Uk, 2000-20 |
| Table 249: Transmission Equipment Cost at Purchase Price in Nominal $ Million, Uk, 2000-20 |
| Table 250: Distribution Equipment Cost at Purchase Price in Nominal $ Million, Uk, 2000-20 |
| Table 251: Transmission Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Cis, 2000-20 |
| Table 252: Distribution Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Cis, 2000-20 |
of Capex, Cis, 2000-20
Table 253: Transmission Equipment Cost at Purchase Price in Nominal $ Million, Cis, 2000-20
Table 254: Distribution Equipment Cost at Purchase Price in Nominal $ Million, Cis, 2000-20
Table 255: Transmission Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Russia, 2000-20
Table 256: Distribution Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Russia, 2000-20
Table 257: Transmission Equipment Cost at Purchase Price in Nominal $ Million, Russia, 2000-20
Table 258: Distribution Equipment Cost at Purchase Price in Nominal $ Million, Russia, 2000-20
Table 259: Transmission Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Asia Pacific, 2000-20
Table 260: Distribution Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Asia Pacific, 2000-20
Table 261: Transmission Equipment Cost at Purchase Price, Nominal $ Million, Asia Pacific, 2000-20
Table 262: Distribution Equipment Cost at Purchase Price, Nominal $ Million, Asia Pacific, 2000-20
Table 263: Transmission Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Japan, 2000-20
Table 264: Distribution Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Japan, 2000-20
Table 265: Transmission Equipment Cost at Purchase Price in Nominal $ Million, Japan, 2000-20
Table 266: Distribution Equipment Cost at Purchase Price in Nominal $ Million, Japan, 2000-20
Table 267: Transmission Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, China, 2000-20
Table 268: Distribution Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, China, 2000-20
Table 269: Transmission Equipment Cost at Purchase Price in Nominal $ Million, China, 2000-20
Table 270: Distribution Equipment Cost at Purchase Price in Nominal $ Million, China, 2000-20
Table 271: Transmission Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, India, 2000-20
Table 272: Distribution Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, India, 2000-20
Table 273: Transmission Equipment Cost at Purchase Price in Nominal $ Million, India, 2000-20
Table 274: Distribution Equipment Cost at Purchase Price in Nominal $ Million, India, 2000-20
Table 275: Transmission Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Se Asia, 2000-20
Table 276: Distribution Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Se Asia, 2000-20
Table 277: Transmission Equipment Cost at Purchase Price in Nominal $ Million, Se Asia, 2000-20
Table 278: Distribution Equipment Cost at Purchase Price in Nominal $ Million, Se Asia, 2000-20
Table 279: Transmission Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Middle East, 2000-20
Table 280: Distribution Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Middle East, 2000-20
Table 281: Transmission Equipment Cost at Purchase Price in Nominal $ Million, Me, 2000-20
Table 282: Distribution Equipment Cost at Purchase Price in Nominal $ Million, Middle East, 2000-20
Table 283: Transmission Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Africa, 2000-20
Table 284: Distribution Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Africa, 2000-20
Table 285: Transmission Equipment Cost at Purchase Price in Nominal $ Million, Africa, 2000-20
Table 286: Distribution Equipment Cost at Purchase Price in Nominal $ Million, Africa, 2000-20
Table 287: Transmission Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Lac, 2000-20
Table 288: Distribution Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Lac, 2000-20
Table 289: Transmission Equipment Cost at Purchase Price in Nominal $ Million, Lac, 2000-20
Table 290: Distribution Equipment Cost at Purchase Price in Nominal $ Million, Lac, 2000-20
Table 291: Transmission Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Brazil, 2000-20
Table 292: Distribution Equipment Cost in Nominal $ Million, at Purchase Price, at Installed Cost And % Share of Capex, Brazil, 2000-20
Table 293: Transmission Equipment Cost at Purchase Price in Nominal $ Million, Brazil, 2000-20
Table 294: Distribution Equipment Cost at Purchase Price in Nominal $ Million, Brazil, 2000-20
<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>295</td>
<td>Sales of Transmission Equipment at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>296</td>
<td>Sales of Distribution Equipment at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>297</td>
<td>Overall T&amp;D Market Leaders</td>
</tr>
<tr>
<td>298</td>
<td>Sales of Power Transformers at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>299</td>
<td>Sales of Distribution Transformers at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>300</td>
<td>Transformer Manufacturers Market Shares</td>
</tr>
<tr>
<td>301</td>
<td>Voltage Levels in Switchgear Categories</td>
</tr>
<tr>
<td>302</td>
<td>Sales of Hv Circuit Breakers at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>303</td>
<td>Sales of Mv Circuit Breakers at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>304</td>
<td>Sales of Transmission Circuit Protectors at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>305</td>
<td>Sales of Distribution Circuit Protectors at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>306</td>
<td>Sales of Transmission Surge Arresters Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>307</td>
<td>Sales of Distribution Surge Arresters Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>308</td>
<td>Sales of Transmission Panels at Purchase Price By Region And Country In</td>
</tr>
<tr>
<td>309</td>
<td>Sales of Air Core Reactors for Transmission at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>310</td>
<td>Sales of Air Core Reactors for Distribution at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>311</td>
<td>Sales of Transmission Fusegear at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>312</td>
<td>Sales of Distribution Fusegear at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>313</td>
<td>Sales of Transmission Switches at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>314</td>
<td>Sales of Distribution Switches at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>315</td>
<td>Sales of Disconnectors for Transmission at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>316</td>
<td>Sales of Disconnectors for Distribution at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>317</td>
<td>Sales of Protection Relays for Transmission at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>318</td>
<td>Sales of Protection Relays for Distribution at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>319</td>
<td>Sales of Lightning Arresters for Transmission at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>320</td>
<td>Sales of Lightning Arresters for Distribution at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>321</td>
<td>Sales of Isolators for Transmission at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>322</td>
<td>Sales of Isolators for Distribution at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>323</td>
<td>Switchgear Market Shares, 2015</td>
</tr>
<tr>
<td>324</td>
<td>Cable Types</td>
</tr>
<tr>
<td>325</td>
<td>Sales of Hv Insulated Cable Including Hv Subsea Cable at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>326</td>
<td>Sales of Mv And Lv Insulated Cable Including Mv Subsea Cable at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>327</td>
<td>Sales of Hv Bare Condutors at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>328</td>
<td>Sales of Mv And Lv Bare Condutors at Purchase Price By Region And Country in Nominal $ Million, 2000 to 2020</td>
</tr>
<tr>
<td>329</td>
<td>the Top Global Cable Manufacturers By Industry</td>
</tr>
</tbody>
</table>
Research and Markets,
Guinness Centre,
Taylors Lane,
Dublin 8,
Ireland.
Fax Order Form
To place an order via fax simply print this form, fill in the information below and fax the completed form to 646-607-1907 (from USA) or +353-1-481-1716 (from Rest of World). If you have any questions please visit
http://www.researchandmarkets.com/contact/

Order Information
Please verify that the product information is correct and select the format(s) you require.

Web Address: http://www.researchandmarkets.com/reports/3788061/
Office Code: SC

Product Formats
Please select the product formats and quantity you require:

<table>
<thead>
<tr>
<th>Product Formats</th>
<th>Quantity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDF and Excel - Single User:</td>
<td></td>
<td>USD 5160</td>
</tr>
<tr>
<td>PDF and Excel - 1 - 20 Users:</td>
<td></td>
<td>USD 9030</td>
</tr>
<tr>
<td>PDF and Excel - Enterprisewide:</td>
<td></td>
<td>USD 12900</td>
</tr>
</tbody>
</table>

* The price quoted above is only valid for 30 days. Please submit your order within that time frame to avail of this price as all prices are subject to change.

Contact Information
Please enter all the information below in BLOCK CAPITALS

<table>
<thead>
<tr>
<th>Title:</th>
<th>Mr</th>
<th>Mrs</th>
<th>Dr</th>
<th>Miss</th>
<th>Ms</th>
<th>Prof</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Name:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last Name:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Email Address: *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Title:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organisation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Address:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postal / Zip Code:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone Number:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fax Number:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Please refrain from using free email accounts when ordering (e.g. Yahoo, Hotmail, AOL)
Payment Information

Please indicate the payment method you would like to use by selecting the appropriate box.

☐ Pay by credit card: You will receive an email with a link to a secure webpage to enter your credit card details.

☐ Pay by check: Please post the check, accompanied by this form, to:
Research and Markets,
Guinness Center,
Taylors Lane,
Dublin 8,
Ireland.

☐ Pay by wire transfer: Please transfer funds to:
Account number 833 130 83
Sort code 98-53-30
Swift code ULSBIE2D
IBAN number IE78ULSB9853308313083
Bank Address Ulster Bank,
27-35 Main Street,
Blackrock,
Co. Dublin,
Ireland.

If you have a Marketing Code please enter it below:

Marketing Code: _______________________

Please note that by ordering from Research and Markets you are agreeing to our Terms and Conditions at http://www.researchandmarkets.com/info/terms.asp

Please fax this form to:
(646) 607-1907 or (646) 964-6609 - From USA
+353-1-481-1716 or +353-1-653-1571 - From Rest of World