Date: December 17, 2021

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For and on behalf of
Frost & Sullivan (Beijing) Inc., Shanghai Branch Co.

Confidential

Global Power Tool and Outdoor Power Equipment Market

Independent Market Research

CHERVON

Final Draft

FROST & SULLIVAN

Prepared by Eva Song, reviewed by Austin Cai, approved by Gabriel Lu

Limitations

Source of Information

- Interviews with industry experts and competitors will be conducted on a best-effort basis to collect information for in-depth analysis for this report.
- Frost & Sullivan will not be responsible for any information gaps where Interviewees have refused to disclose confidential data or figures.
- The study took 2020 as the base year for analysis and 2021-2025 for forecast. However, some of the figures of 2020 may not have become available from public statistical sources at the time when we conducted research for this report. Frost & Sullivan will use the latest information available (e.g. 2019) or make projections based on historical trends.

- Under circumstances where information is not available, Frost & Sullivan in-house analysis will be leveraged using appropriate models and indicators to arrive at an estimate.
- Sources of information and data will be clearly stated in the bottom right hand corner on each slide for reference.

Scope

- **The project scope is defined as follows:**

Research Period	• Historical Year: 2016-2019 • Base Year: 2020 • Forecast Year: 2021-2025E
Research Coverage	• Global • Europe • NA • Asia-Pacific • China
Service Scope	• Power Tool • Outdoor Power Equipment

Methodologies and Assumptions

Methodologies and Assumptions

- Frost & Sullivan is an independent global consulting firm, which was founded in 1961 in New York. It offers industry research and market strategies and provides growth consulting and corporate training. Its industry coverage includes automotive and transportation, chemicals, materials and food, commercial aviation, consumer products, energy and power systems, environment and building technologies, healthcare, industrial automation and electronics, industrial and machinery, and technology, media and telecom.

- The Frost & Sullivan's report includes information on Global Power Tool and Global Outdoor Power Equipment Market data. Frost & Sullivan has conducted detailed primary research which involved discussing the status of the industry with certain leading industry participants. Frost & Sullivan has also conducted secondary research which involved reviewing company reports, independent research reports and data based on its own research database. Frost & Sullivan has obtained the figures for the estimated total market size from historical data analysis plotted against macroeconomic data as well as considered the above-mentioned industry key drivers.

- Frost & Sullivan's Market Engineering Forecasting Methodology integrates several forecasting techniques with the Market Engineering Measurement-based System. It relies on the expertise of the analyst team in integrating the critical market elements investigated during the research phase of the project. These elements include:
  - ✓ Expert-opinion forecasting methodology
  - ✓ Integration of market drivers and restraints
  - ✓ Integration with the market challenges
  - ✓ Integration of the Market Engineering Measurement trends
  - ✓ Integration of econometric variables

- In compiling and preparing the Report, Frost & Sullivan has adopted the following assumptions:
  - ✓ Global social, economic and political environment is likely to remain stable in the forecast period
  - ✓ Purchasing power is expected to continue to rise rapidly in emerging regions and to grow steadily in developed regions
  - ✓ Related industry key drivers are likely to drive the market in the forecast period
- **The market research was completed in December 2021.**

Agenda

1. Overview of Global Power Tool Market
2. Overview of Global Outdoor Power Equipment Market
3. Competitive Landscape Overview
4. Appendix

Definition and Classification

➢ **Power Tools** refer to the type of tools that work with additional power and mechanism other than purely manual labor like hand tools. Power tools analyzed in this report consist of screwdrivers, hammers, drillers, saws, sanders, grinders, and other power tools.

• **End-user Scenario:** In terms of end-user scenario, the power tool market is divided into two major segments: consumer segment and industrial & professional segment.

- Consumer segment refers to end-users of the product that mainly use power tools for DIY purposes, including but not limited to home improvement.
- Industrial & professional segment refers to end-users who use the power tools for business operation purposes such as workers on the construction sites or mechanics using power tools in building or repairing mechanical parts of relevant job tasks.

• **Power source:** As to the power source classification, the power tool market can be divided into two major categories: electric power tools, and other power tools.

- Electric power tools refer to the power tools that are actuated by electricity. Under electric power tools, they could be further divided into corded power tools and cordless power tools (DC).
  - Corded power tools refer to electric power tools that are attached to a cord for electricity power (AC).
  - Cordless power tools refer to the electric power tools that are powered by batteries and are not attached to a cord (DC).
- Other power tools are power tools powered by other power sources other than air and electricity, such as hydraulic power tools, powder-actuated power tools, and fuel-powered power tools, and pneumatic power tools etc.

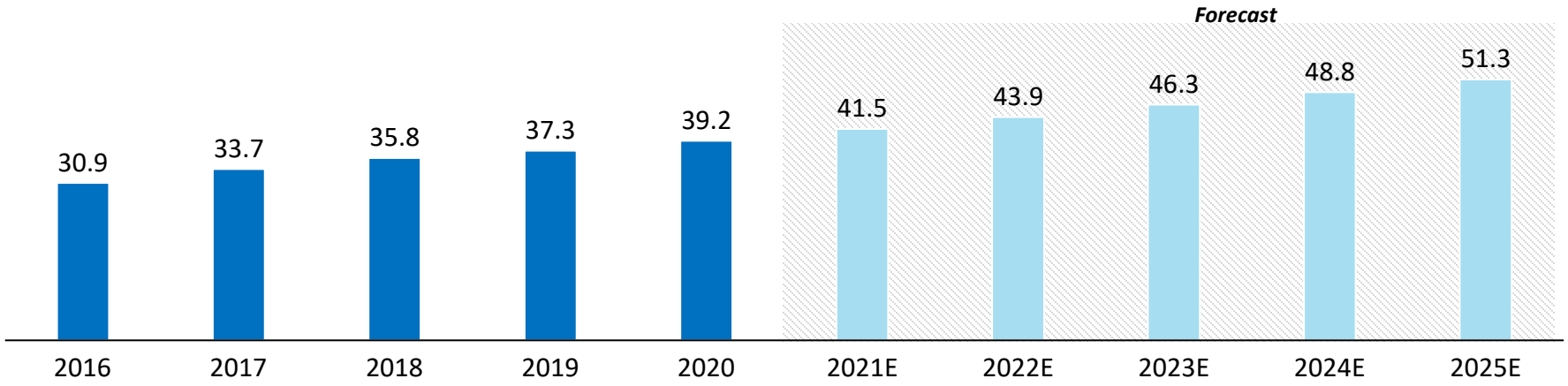
Note: Cordless power tools here refer to lithium-ion battery-powered tools

Source: Frost & Sullivan Analysis and Estimates

Global Power Tool Market

Global Power Tool Market
USD Billion; 2016-2025E

CAGR	2016-2020	2020-2025E	2016-2025E
Global Power Tool Market	6.1%	5.5%	5.8%



Note: The market size refers to the sum of revenue generated by power tool companies.

- The global power tool industry experienced a stable growth at a CAGR of approximately 6.1% between 2016 and 2020, increasing from approximately USD30.9 billion to approximately USD39.2 billion. Attributable to the substantial construction demand from continued urbanization and the robust economic development in emerging economies, the global power tool industry is projected to reach approximately USD51.3 billion at a CAGR of approximately 5.5% between 2020 and 2025.

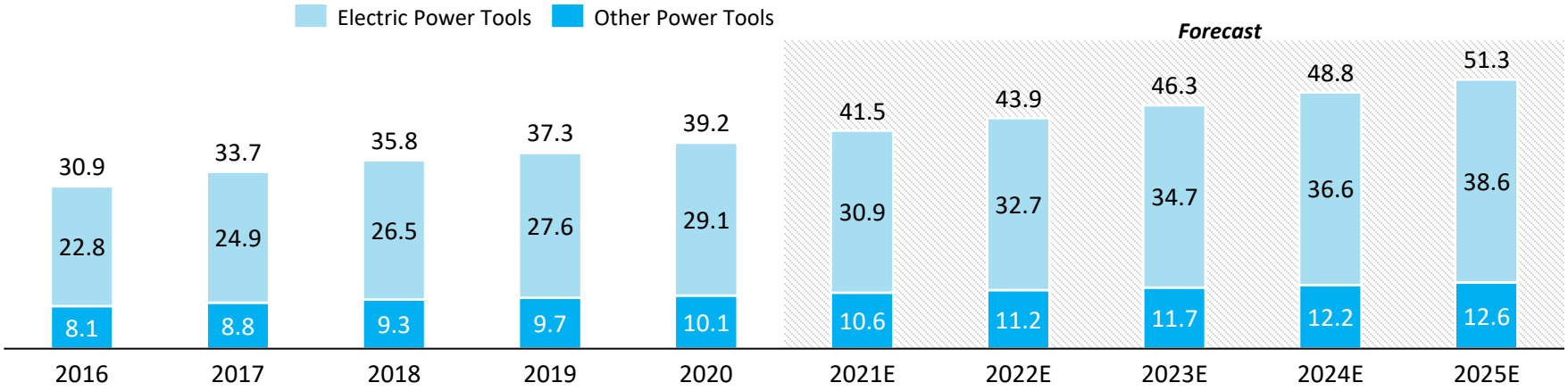
Source: Frost & Sullivan Analysis and Estimates

Global Power Tool Market Breakdown

Global Power Tool Market Breakdown by Power Source

USD Billion; 2016-2025E

CAGR	Total	Electric Power Tools	Other Power Tools
2016-2020	6.1%	6.2%	5.8%
2020-2025E	5.5%	5.9%	4.5%
2016-2025E	5.8%	6.0%	5.1%



Note: The market size refers to the sum of revenue generated by power tool companies.

- The global power tool market can be divided into two main segments by power source, namely electric power tools and other power tools. Apparently, the electric power tools segment played an increasingly significant role in the global power tool market due to the innovations especially in battery technology. Between 2016 and 2020, the global electric power tools segment experienced stable growth with the market size increased from approximately USD22.8 billion to approximately USD29.1 billion at a CAGR of approximately 6.2% during the period. By 2025, the global electric power tools segment is expected to reach approximately USD38.6 billion with a CAGR of approximately 5.9%, accounting for approximately 75.3% of the total global power market as at the end of 2025.

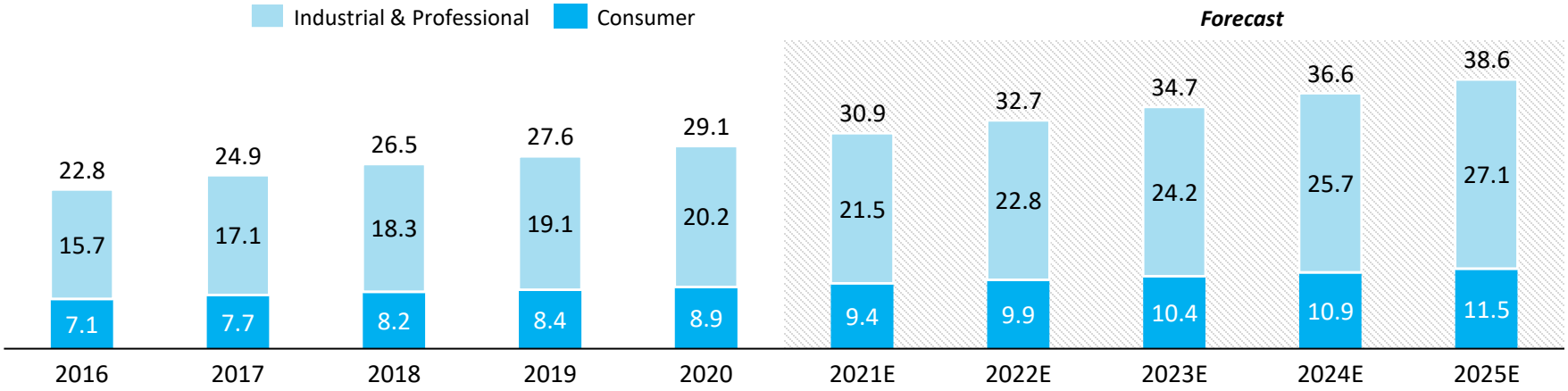
Source: Frost & Sullivan Analysis and Estimates

Global Electric Power Tool Market Breakdown

Global Electric Power Tool Market Breakdown by Segment

USD Billion; 2016-2025E

CAGR	Total	Industrial & Professional	Consumer
2016-2020	6.2%	6.5%	5.7%
2020-2025E	5.9%	6.1%	5.3%
2016-2025E	6.0%	6.3%	5.5%



Note: The market size refers to the sum of revenue generated by power tool companies.

- Based on segmentation, the electric power tool market can be separated into two major segments, namely industrial & professional and consumer segments. Industrial & professional electric power tools are normally used for a wide spectrum of commercial application scenarios for various assignments. And its market size captured a significant share of approximately 69.5% of the total electric power tool market in 2020. Between 2016 and 2020, the industrial & professional segment increased from approximately USD15.7 billion to approximately USD20.2 billion at a CAGR of approximately 6.5%. By 2025, the industrial & professional segment is projected to reach approximately USD27.1 billion. In addition, driven by the characteristics of flexibility and user-friendly features, the consumer segment also experienced a steady growth in the past years and reached a value of approximately USD 8.9 billion in 2020 at a CAGR of approximately 5.7% between 2016 and 2020.

Source: Frost & Sullivan Analysis and Estimates

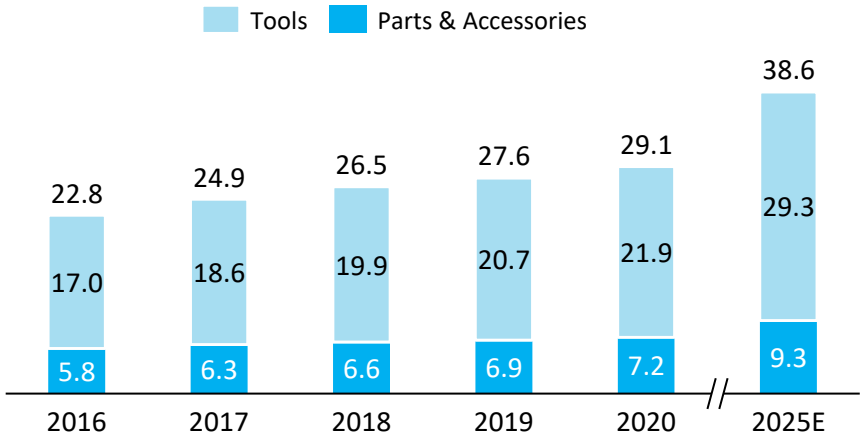
Global Electric Power Tool Market Breakdown

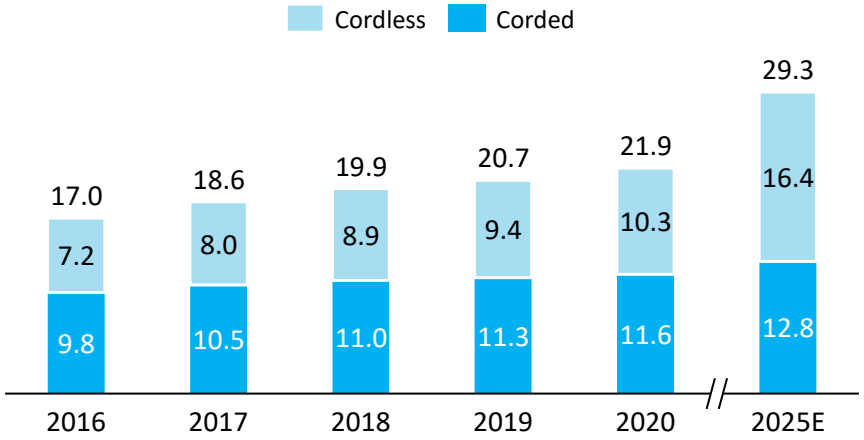
Global Electric Power Tool Market Breakdown by Category

USD Billion; 2016-2025E

CAGR	Total	Tools	Parts & Accessories
2016-2020	6.2%	6.4%	5.6%
2020-2025E	5.9%	6.0%	5.3%
2016-2025E	6.0%	6.2%	5.5%

CAGR	Cordless	Corded
2016-2020	9.3%	4.2%
2020-2025E	9.9%	2.1%
2016-2025E	9.6%	3.0%





Note: The market size refers to the sum of revenue generated by power tool companies.

- The electric power tool market consists of tools and parts and accessories, in which tools occupied approximately 75.2% of the total market share in 2020. In addition, electric tools can be further divided into two sub-segments by products type, namely cordless and corded products. Contribution to consumers' preference for portable, convenience and environment-friendly products and advanced battery innovation, the market size of cordless electric power tools experienced a relatively fast growth, increasing from approximately USD7.2 billion in 2016 to approximately USD10.3 billion in 2020 at a CAGR of approximately 9.3% between 2016 and 2020. In addition, the shift from nickel to lithium-ion batteries has greatly improved the performance of cordless products. By 2025, the market size of cordless electric power tools is estimated to reach approximately USD16.4 billion and account for approximately 56.2% of the tools segment.

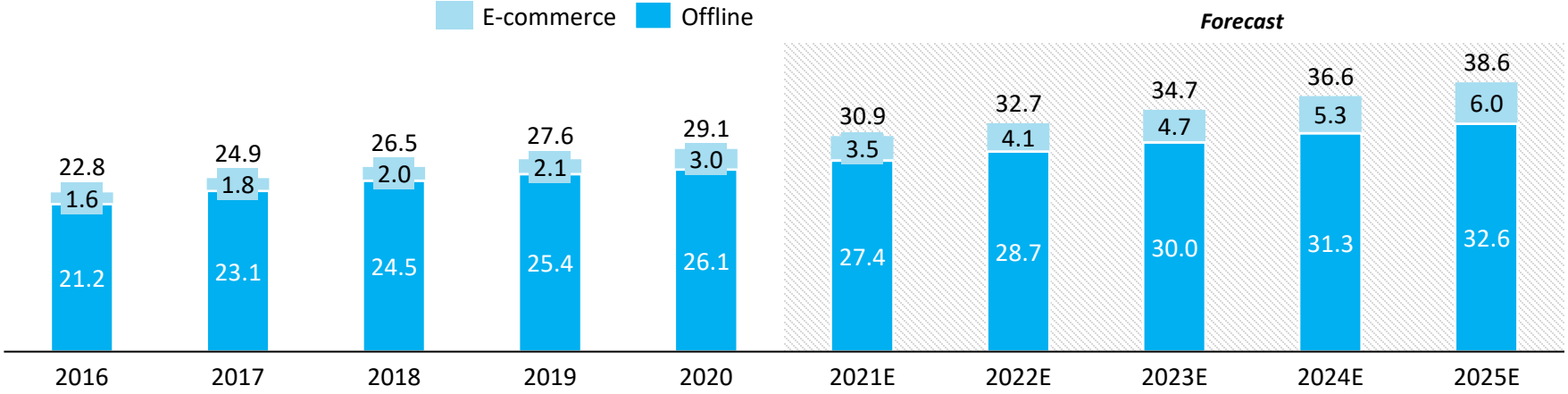
Source: Frost & Sullivan Analysis and Estimates

Global Electric Power Tool Market Breakdown

Global Electric Power Tool Market Breakdown by Channel

USD Billion; 2016-2025E

CAGR	Total	E-commerce	Offline
2016-2020	6.2%	15.9%	5.4%
2020-2025E	5.9%	15.1%	4.6%
2016-2025E	6.0%	15.4%	4.9%



Note: The market size refers to the sum of revenue generated by power tool companies. The market size of e-commerce refers to the sum of revenue generated by online retailers, excluding the revenue generated through the online channels of the offline retailers.

- By 2020, the global electric power tool market was valued at approximately USD29.1 billion and is expected to further increase at a CAGR of approximately 5.9% between 2020 and 2025. Affected by the COVID-19 pandemic, the distribution landscape has undergone an obvious transformation last year. Yet, offline channel including KA and dealer still remained a larger portion for the distribution of electric power tools with the sales value combined increased from approximately USD21.2 billion in 2016 to approximately USD26.1 billion in 2020 while the online channel experienced a stunning increase with a CAGR of approximately 15.9% during the same period, which accounted for approximately 10.2% of the total market as at the end of 2020. By 2025, the online market segment is projected to double its scale and reach approximately USD6.0 billion at a CAGR of approximately 15.1%.

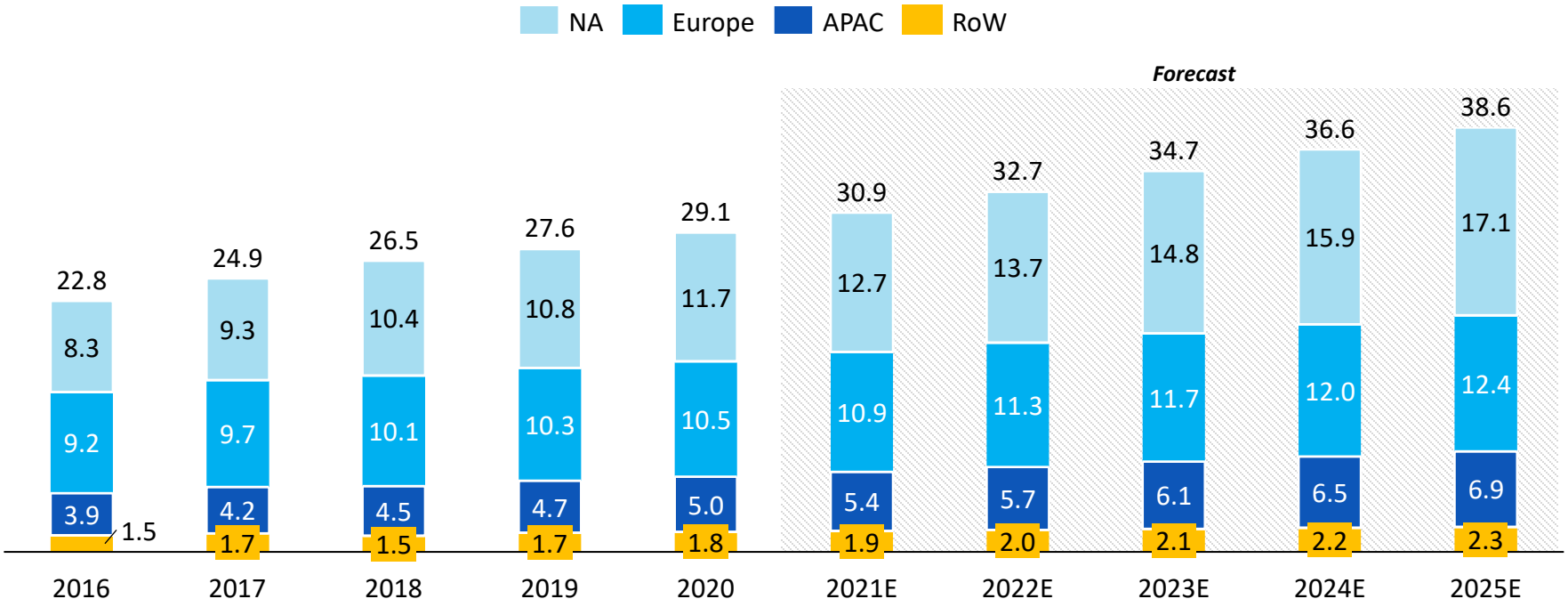
Source: Frost & Sullivan Analysis and Estimates

Global Electric Power Tool Market Breakdown

Global Electric Power Tool Market Breakdown by Region

USD Billion; 2016-2025E

CAGR	Total	NA	Europe	APAC	RoW
2016-2020	6.2%	9.0%	3.4%	6.8%	4.8%
2020-2025E	5.9%	7.8%	3.3%	6.5%	4.6%
2016-2025E	6.0%	8.4%	3.4%	6.6%	4.7%



Note: The market size refers to the sum of revenue generated by power tool companies.

Source: Frost & Sullivan Analysis and Estimates

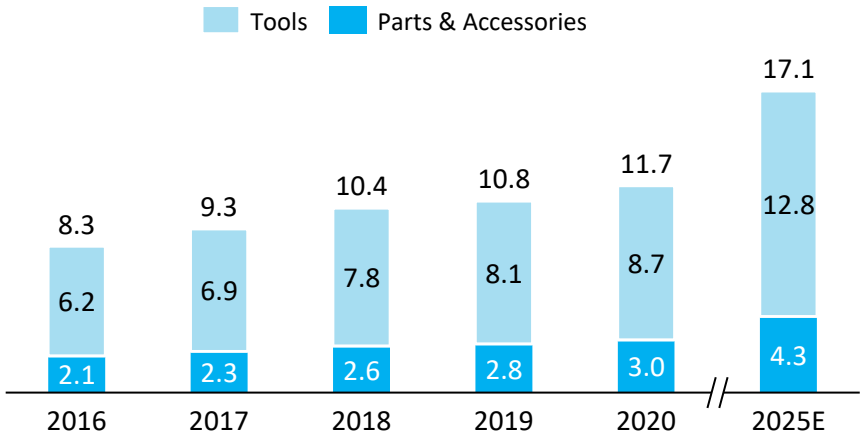
Electric Power Tool Market Breakdown (NA)

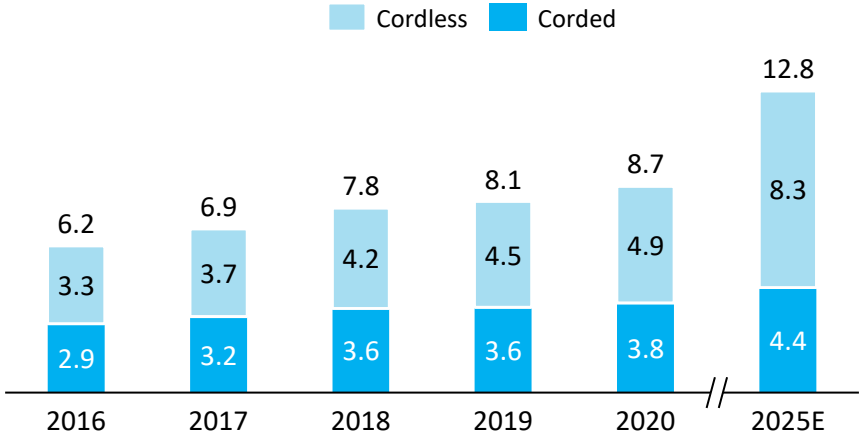
Electric Power Tool Market Breakdown by Category, NA

USD Billion; 2016-2025E

CAGR	Total	Tools	Parts & Accessories
2016-2020	9.0%	8.9%	9.4%
2020-2025E	7.8%	7.9%	7.7%
2016-2025E	8.4%	8.3%	8.5%

CAGR	Cordless	Corded
2016-2020	10.7%	6.8%
2020-2025E	11.0%	3.2%
2016-2025E	10.9%	4.8%





Note: The market size refers to the sum of revenue generated by power tool companies.

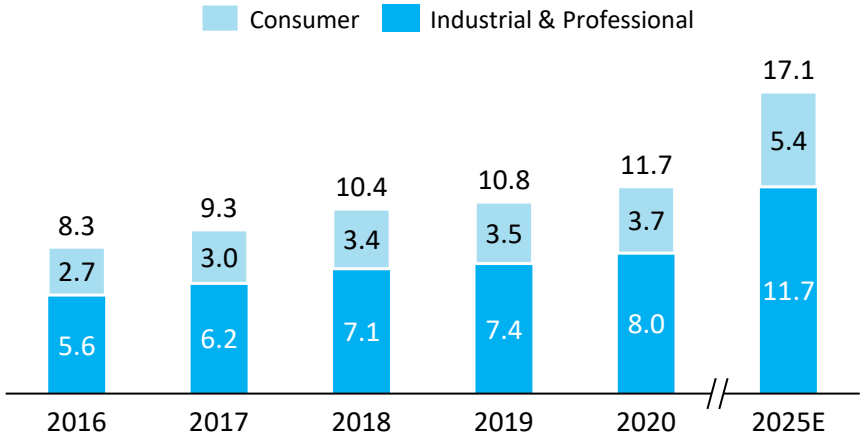
- NA's electric power tool market experienced a relatively fast growth at a CAGR of approximately 9.0% between 2016 and 2020. The tools segment contributed a CAGR of approximately 8.9% during the same period attributable to the increasing demand from various scenarios. By 2025, the tools segment is projected to reach approximately USD12.8 billion. Attributable to the prevalence of advanced battery technology and consumer recognition, cordless electric power tools have gradually picked up their scale and occupied a larger market share than traditional corded products since 2016. Between 2016 and 2020, the cordless electric power tools experienced a rapid increase from approximately USD3.3 billion to approximately USD4.9 billion at a CAGR of approximately 10.7%. By 2025, the market size of cordless electric power tools is estimated to reach approximately USD8.3 billion and account for approximately 65.2% of the tools segment.

Source: Frost & Sullivan Analysis and Estimates

Electric Power Tool Market Breakdown (NA)

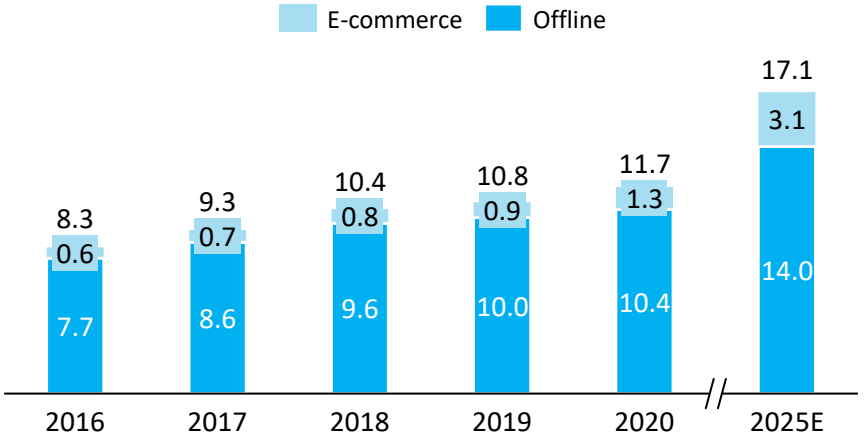
Electric Power Tool Market Breakdown by Segment, NA
USD Billion; 2016-2025E

CAGR	Consumer	Industrial & Professional
2016-2020	8.5%	9.3%
2020-2025E	7.5%	8.0%
2016-2025E	8.0%	8.6%



Electric Power Tool Market Breakdown by Channel, NA
USD Billion; 2016-2025E

CAGR	E-commerce	Offline
2016-2020	20.4%	8.0%
2020-2025E	19.1%	6.1%
2016-2025E	19.7%	6.9%



Note: The market size refers to the sum of revenue generated by power tool companies. The market size of e-commerce refers to the sum of revenue generated by online retailers, excluding the revenue generated through the online channels of the offline retailers.

- Apart from the industrial and professional segment, the consumer segment of the electric power tool market in NA occupied a relatively large market share compared to other regions and countries attributable to its cultural enthusiasm for DIY activities in household maintenance and improvement. Between 2016 and 2020, the market size of the consumer segment increased from approximately USD2.7 billion to approximately USD3.7 billion with a CAGR of approximately 8.5%. Benefiting from the high penetration rate of internet users and advanced infrastructure, the online sales of electric power tool market experienced a substantial growth and reached approximately a value of USD1.3 billion at a CAGR of approximately 20.4% in 2020. By 2025, the online sales of electric power tools is estimated to reach approximately USD3.1 billion with a CAGR of approximately 19.1% between 2020 and 2025.

Source: Frost & Sullivan Analysis and Estimates

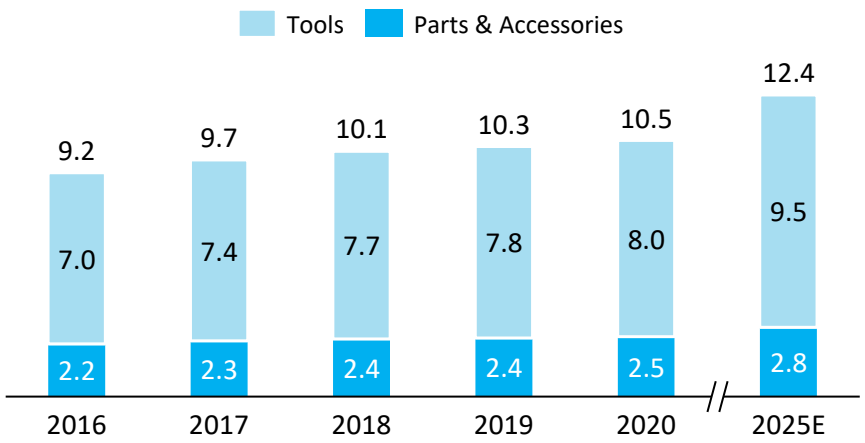
Electric Power Tool Market Breakdown (Europe)

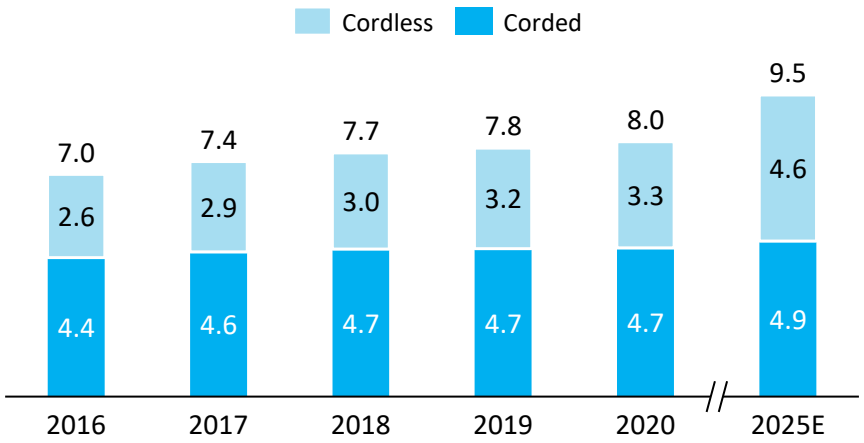
Electric Power Tool Market Breakdown by Category, Europe

USD Billion; 2016-2025E

CAGR	Total	Tools	Parts & Accessories
2016-2020	3.4%	3.5%	3.3%
2020-2025E	3.3%	3.4%	3.0%
2016-2025E	3.4%	3.5%	3.1%

CAGR	Cordless	Corded
2016-2020	6.3%	1.7%
2020-2025E	6.6%	0.9%
2016-2025E	6.5%	1.3%





Note: The market size refers to the sum of revenue generated by power tool companies.

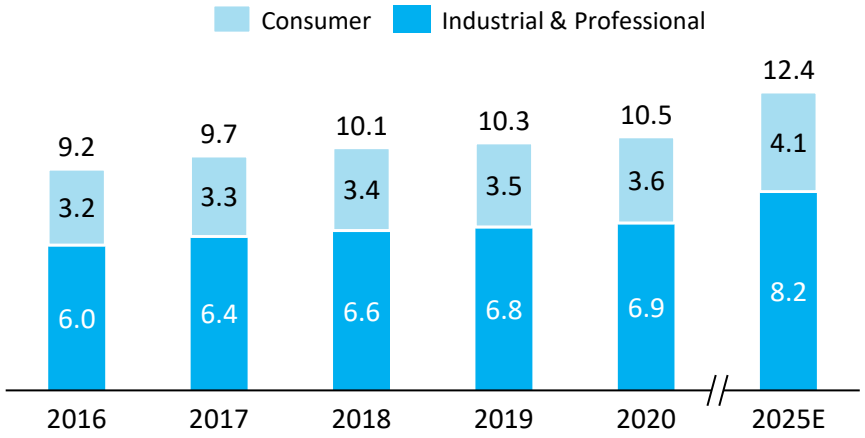
- Europe, as the second-largest market of the global electric power tool industry, experienced stable growth in the past five years with the market size increasing from approximately USD9.2 billion in 2016 to approximately USD10.5 billion in 2020 at a CAGR of approximately 3.4%. By 2025, the market size of the electric power tool in Europe is projected to reach approximately USD12.4 billion at a CAGR of 3.3%.
- Compared to the cordless segment in NA, the market size of cordless power tools in Europe showed a relatively stable growth, increasing from approximately USD2.6 billion to approximately USD3.3 billion between 2016 and 2020. By 2025, the cordless segment is estimated to reach approximately USD4.6 billion at a CAGR of approximately 6.6%, accounting for approximately 48.4% of the electric power tools segment.

Source: Frost & Sullivan Analysis and Estimates

Electric Power Tool Market Breakdown (Europe)

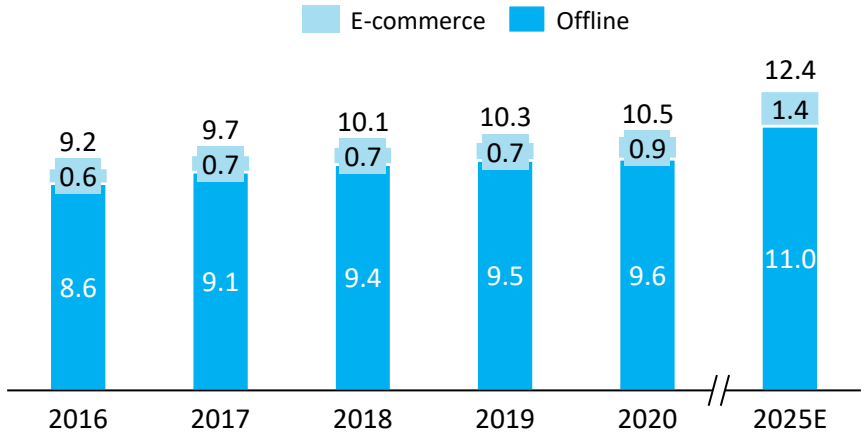
Electric Power Tool Market Breakdown by Segment, Europe
USD Billion; 2016-2025E

CAGR	Consumer	Industrial & Professional
2016-2020	3.1%	3.6%
2020-2025E	3.0%	3.5%
2016-2025E	3.0%	3.6%



Electric Power Tool Market Breakdown by Channel, Europe
USD Billion; 2016-2025E

CAGR	E-commerce	Offline
2016-2020	10.8%	2.9%
2020-2025E	9.1%	2.7%
2016-2025E	9.9%	2.8%



Note: The market size refers to the sum of revenue generated by power tool companies. The market size of e-commerce refers to the sum of revenue generated by online retailers, excluding the revenue generated through the online channels of the offline retailers.

- In the past five years, the industrial & professional segment in Europe still occupied a larger proportion. Between 2016 and 2020, the industrial & professional products experienced a steady growth, increasing from approximately USD6.0 billion to approximately USD6.9 billion at a CAGR of approximately 3.6%, accounting for approximately 66.1% of the total market. By 2025, the industrial & professional segment is projected to keep a sustainable growth and reach approximately USD8.2 billion at a CAGR of 3.5%. In 2020, offline retailers occupied approximately 91.3% of Europe electric power tool market and is estimated to reach approximately USD11.0 billion at a relatively stable CAGR of 2.7% by 2025. In addition, the online channel also presented a strong growth, increasing from approximately USD0.6 billion to approximately USD0.9 billion at a promising CAGR of approximately 10.8% between 2016 and 2020.

Source: Frost & Sullivan Analysis and Estimates

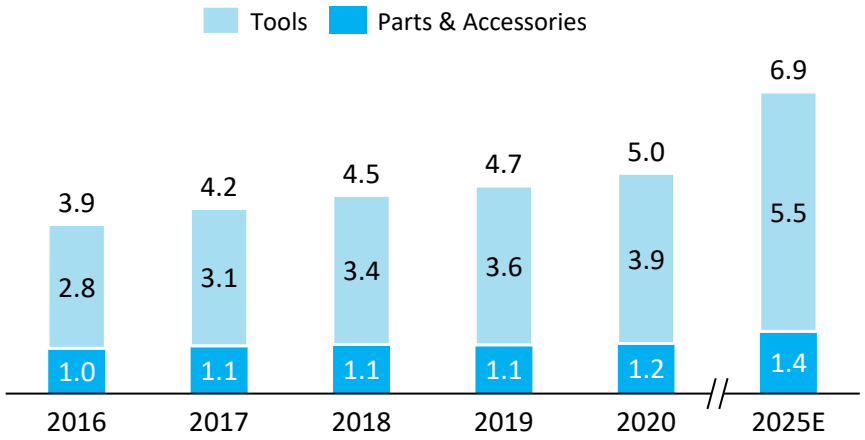
Electric Power Tool Market Breakdown (APAC)

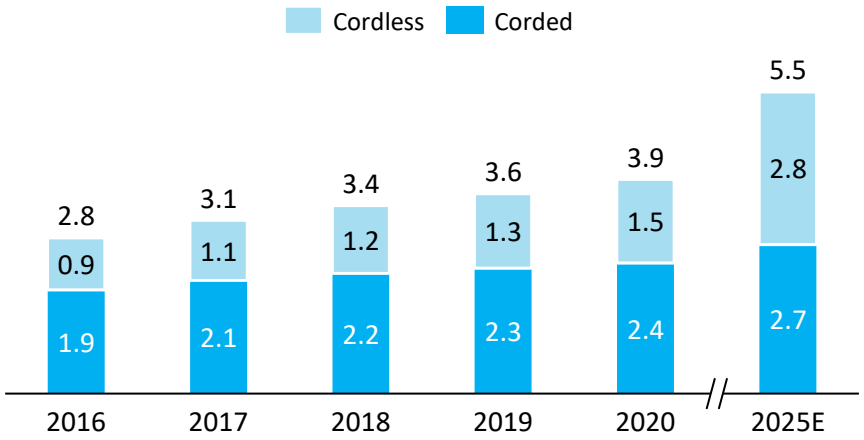
Electric Power Tool Market Breakdown by Products, APAC

USD Billion; 2016-2025E

CAGR	Total	Tools	Parts & Accessories
2016-2020	6.8%	8.3%	2.6%
2020-2025E	6.5%	7.1%	4.4%
2016-2025E	6.6%	7.6%	3.6%

CAGR	Cordless	Corded
2016-2020	12.6%	5.9%
2020-2025E	12.8%	2.7%
2016-2025E	12.7%	4.1%





Note: The market size refers to the sum of revenue generated by power tool companies.

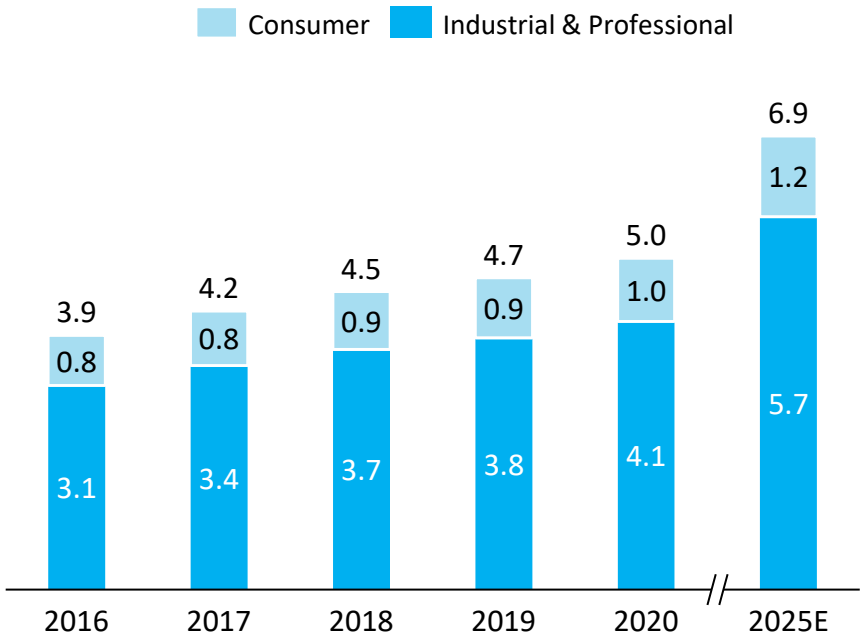
- Attributable to the robust economic growth, Asian countries, especially China, have been actively investing substantial amount of capital in infrastructure construction and encouraging the rapid growth of manufacturing industry. Between 2016 and 2020, the market size of electric power tool industry in APAC experienced a relatively strong growth, increasing from approximately USD3.9 billion to approximately USD5.0 billion at a CAGR of approximately 6.8%. Developing economies across APAC are expected to continue to post strong demand, spurring advance in local production. By 2025, the electric power tool market in APAC is projected to reach approximately USD6.9 billion at a CAGR of approximately 6.5%. In addition, the cordless electric power tools represented a strong growth and accounted for approximately 39.0% of the total tools segment. Besides, due to the booming of e-commerce economy in APAC, the online sales of electric power tools experienced a stunning growth at a CAGR of approximately 16.1% between 2016 and 2020.

Source: Frost & Sullivan Analysis and Estimates

Electric Power Tool Market Breakdown (APAC)

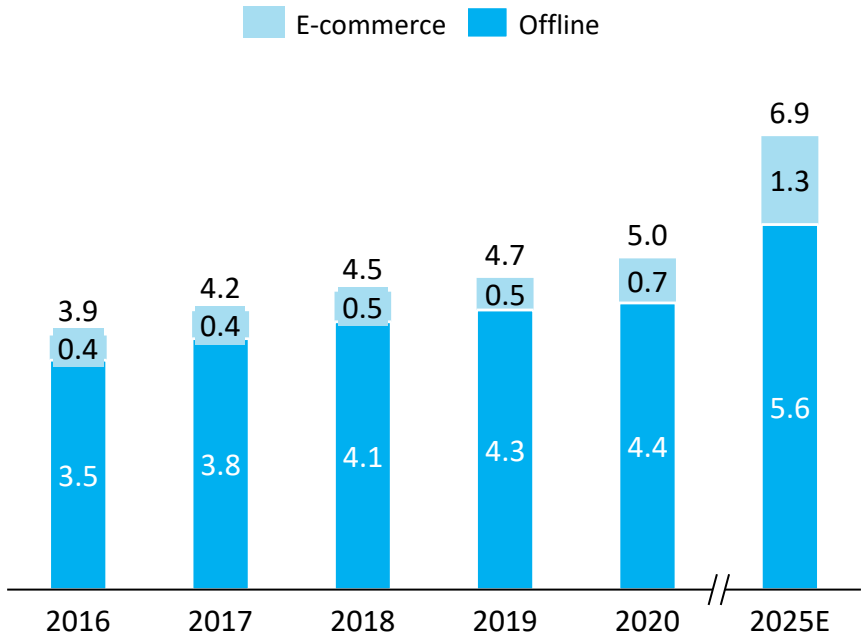
Electric Power Tool Market Breakdown by Segment, APAC
USD Billion; 2016-2025E

CAGR	Consumer	Industrial & Professional
2016-2020	5.9%	7.1%
2020-2025E	5.1%	6.8%
2016-2025E	5.5%	6.9%



Electric Power Tool Market Breakdown by Channel, APAC
USD Billion; 2016-2025E

CAGR	E-commerce	Offline
2016-2020	16.1%	5.7%
2020-2025E	14.8%	5.0%
2020-2025E	15.4%	5.3%



Note: The market size refers to the sum of revenue generated by power tool companies. The market size of e-commerce refers to the sum of revenue generated by online retailers, excluding the revenue generated through the online channels of the offline retailers.

Source: Frost & Sullivan Analysis and Estimates

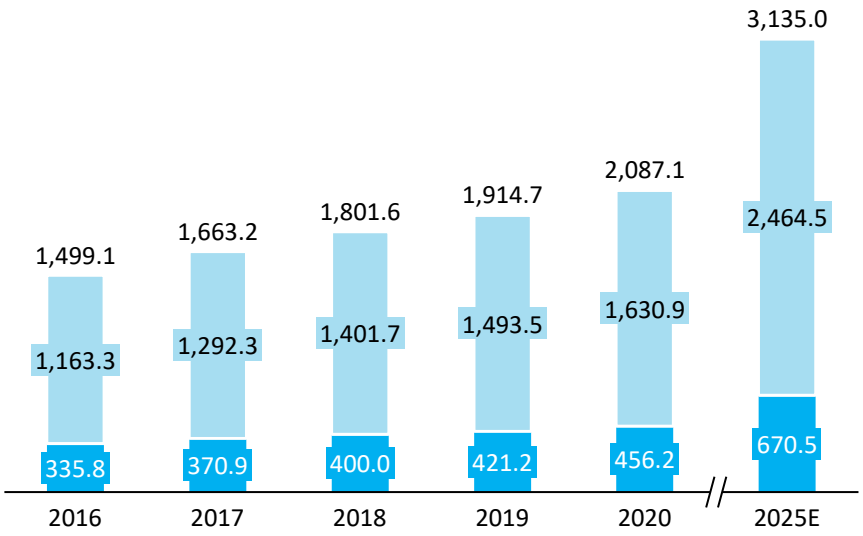
Electric Power Tool Market Breakdown (China)

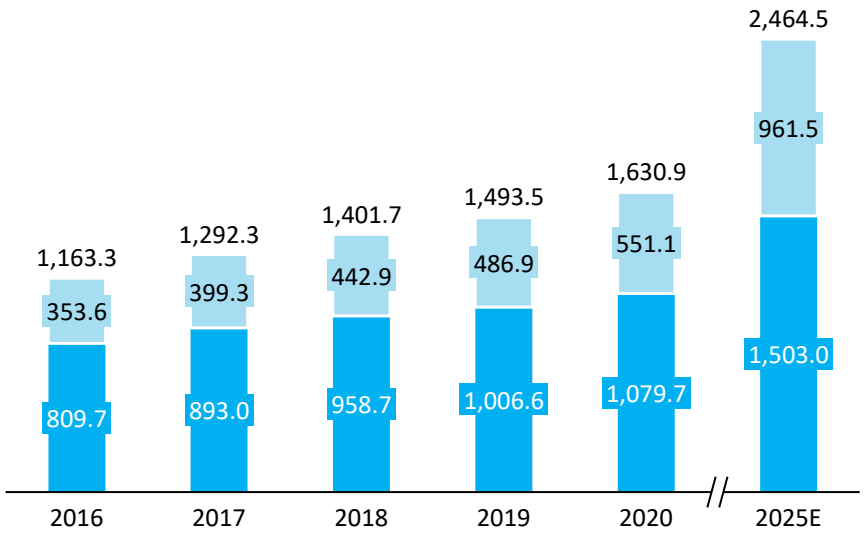
Electric Power Tool Market Breakdown by Products, China

USD Million; 2016-2025E

CAGR	Total	Tools	Parts & Accessories
2016-2020	8.6%	8.8%	8.0%
2020-2025E	8.5%	8.6%	8.0%
2016-2025E	8.5%	8.7%	8.0%

CAGR	Cordless	Corded
2016-2020	11.7%	7.5%
2020-2025E	11.8%	6.8%
2016-2025E	11.8%	7.1%





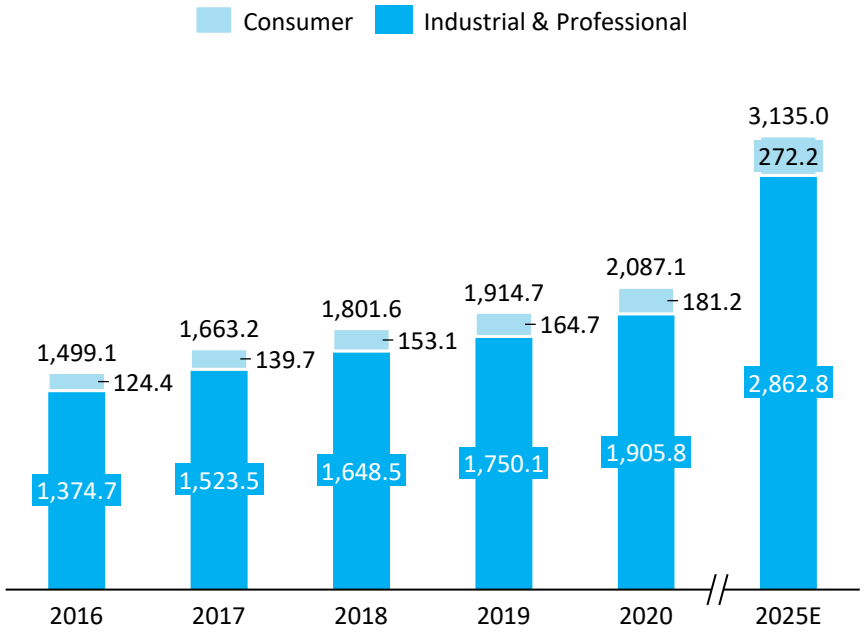
Note: The market size refers to the sum of revenue generated by power tool companies.

Source: Frost & Sullivan Analysis and Estimates

Electric Power Tool Market Breakdown (China)

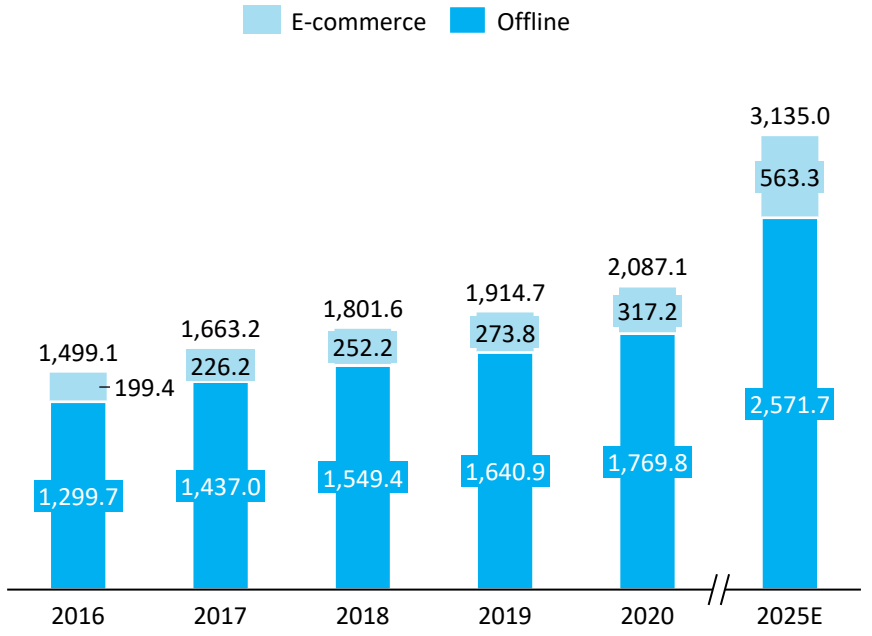
Electric Power Tool Market Breakdown by Segment, China
USD Million; 2016-2025E

CAGR	Consumer	Industrial & Professional
2016-2020	9.9%	8.5%
2020-2025E	8.5%	8.5%
2016-2025E	9.1%	8.5%



Electric Power Tool Market Breakdown by Channel, China
USD Million; 2016-2025E

CAGR	E-commerce	Offline
2016-2020	12.3%	8.0%
2020-2025E	12.2%	7.8%
2020-2025E	12.2%	7.9%



Note: The market size refers to the sum of revenue generated by power tool companies; The market size of e-commerce refers to the sum of revenue generated by online retailers, excluding the revenue generated through the online channels of the offline retailers.

Source: Frost & Sullivan Analysis and Estimates

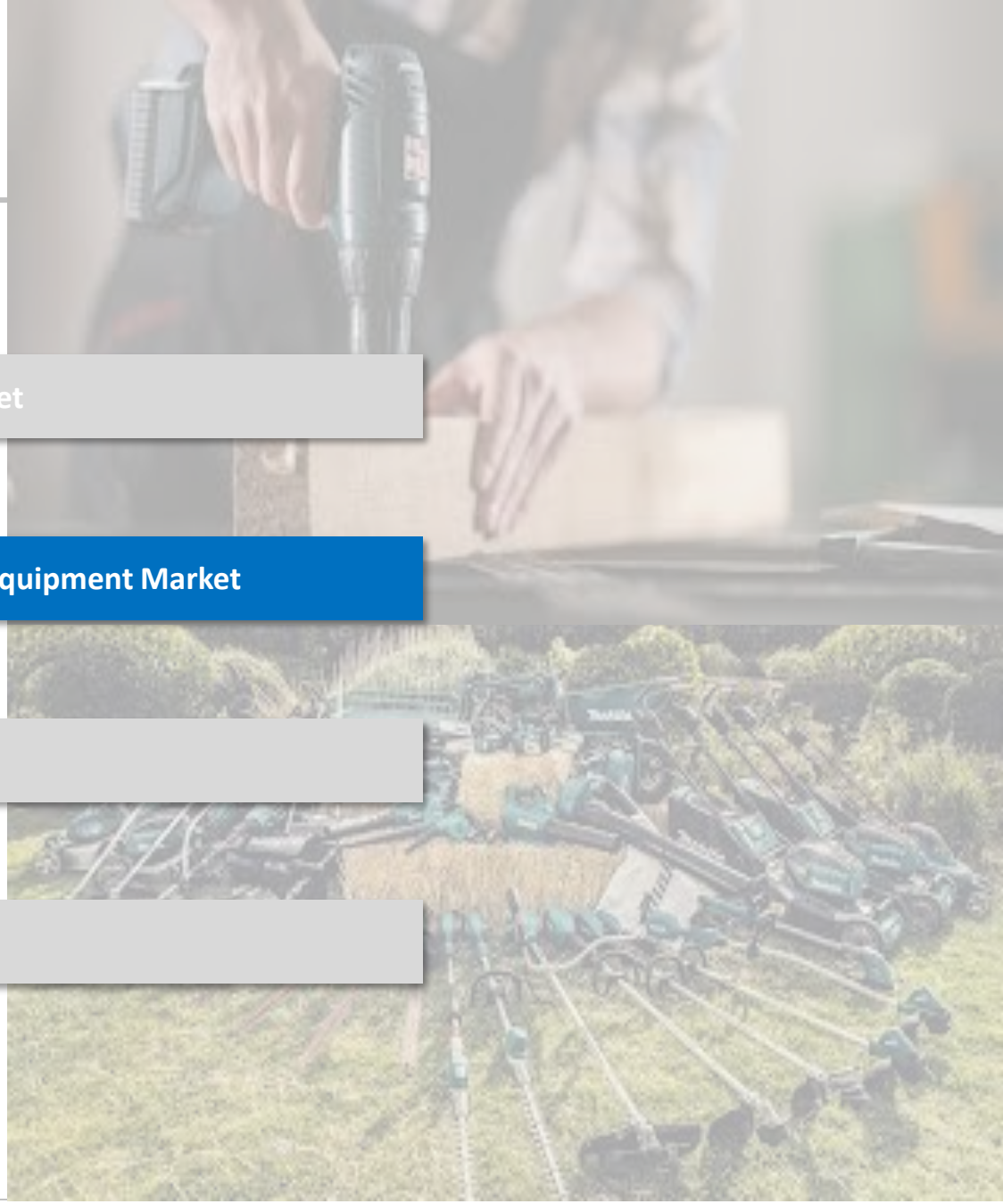
Agenda

1. Overview of Global Power Tool Market

2. Overview of Global Outdoor Power Equipment Market

3. Competitive Landscape Overview

4. Appendix



Definition and Classification

- **Outdoor Power Equipment (OPE)** analyzed in this report can be broadly defined as the tools or equipment that are primarily used for garden or yard maintenance, including lawnmowers, leaf blowers, snowblowers, trimmers, tillers, and other outdoor power equipment.

• **End-user Scenario:** In terms of end-user scenario, the outdoor power equipment market is divided into two major segments: residential segment and commercial segment.

- Residential segment refers to the end-users of the products that mainly use outdoor power equipment for DIY purposes, such as yard care or garden care.
- Commercial segment refers to professional end-users that mainly utilize outdoor power equipment for a broader range of operations and assignments including but not limited to professional stadium turf or golf turf management.

• **Power Source:** As to the power source classification, the outdoor power equipment market can be divided into: electric outdoor power equipment and gas-driven outdoor power tool equipment.

- Electric outdoor power equipment refers to the outdoor power equipment that is actuated by electricity. Under electric outdoor power equipment, it could be further divided into corded outdoor power equipment (AC) and cordless outdoor power equipment (DC).
  - Corded outdoor power equipment refers to electric outdoor power equipment that is attached to a cord for electricity power (AC).
  - Cordless outdoor power equipment refers to the electric outdoor power equipment that is powered by batteries and are not attached to a cord (DC).
- Gas-driven outdoor power equipment is specified as the outdoor power equipment that is actuated by fuel-powered engine.

Note: Cordless power tools here refer to lithium-ion battery-powered tools

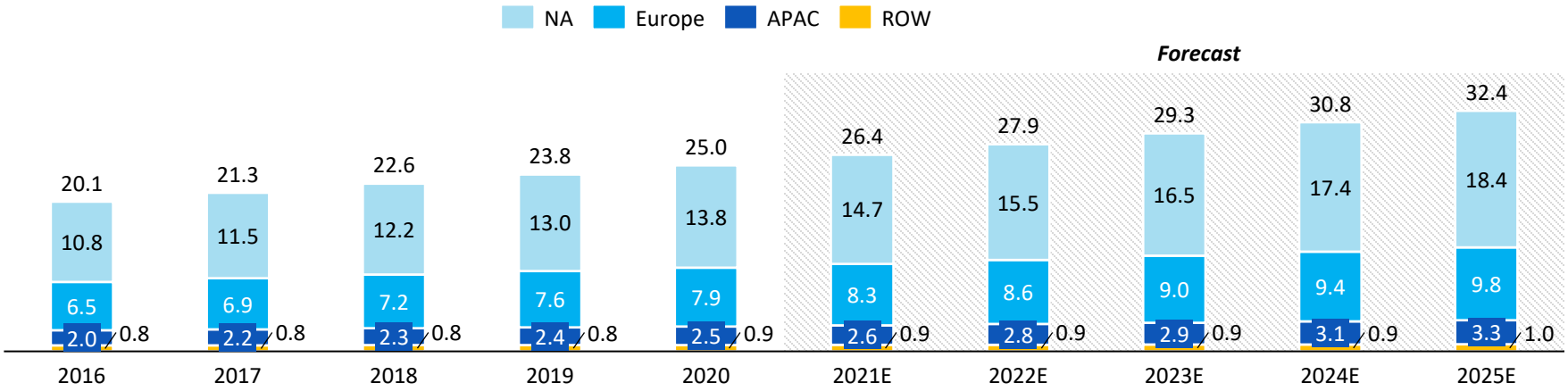
Source: Frost & Sullivan Analysis and Estimates

Global Outdoor Power Equipment Market Breakdown by Region

Global Outdoor Power Equipment Market Breakdown by Region

USD Billion; 2016-2025E

CAGR	Total	NA	Europe	APAC	ROW
2016-2020	5.6%	6.4%	4.9%	5.3%	1.6%
2020-2025E	5.3%	5.9%	4.4%	5.4%	2.2%
2016-2025E	5.4%	6.1%	4.6%	5.4%	2.0%



Note: The market size refers to the sum of revenue generated by outdoor power equipment companies.

- The global outdoor power equipment market experienced stable growth in the past five years with the market scale increasing from approximately USD20.1 billion to USD25.0 billion at a CAGR of 5.6% between 2016 and 2020. Among all the regions, NA contributed the most to global outdoor power equipment market growth with a CAGR of 6.4% due to its mature market dynamics and Americans' long-term habit of gardening care, followed by the CAGRs of APAC and Europe at 5.3% and 4.9%, respectively. In terms of market scale, NA expanded from approximately USD10.8 billion in 2016 to approximately USD13.8 billion in 2020 and is expected to further increase to approximately USD18.4 billion by 2025.
- Due to the shaky economic condition and already flat and mature market, Europe, compared to other regions, increased from approximately USD6.5 billion in 2016 to approximately USD7.9 billion in 2020 and is anticipated to reach approximately USD9.8 billion in 2025. In parallel, the outdoor power equipment market in APAC increased from approximately USD2.0 billion to approximately USD2.5 billion between 2016 and 2020 since the market is relatively in infancy and is expected to continue its robust growth to approximately USD3.3 billion in 2025.

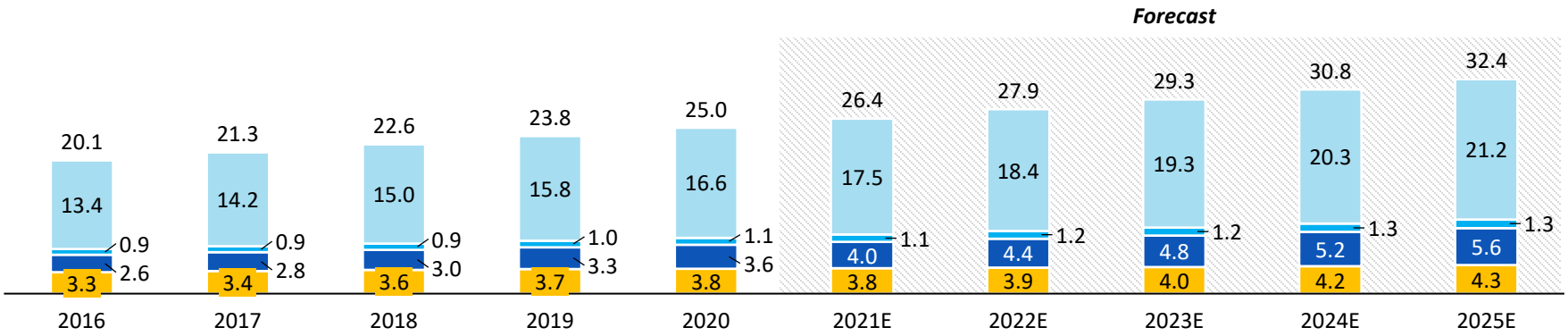
Source: Frost & Sullivan Analysis and Estimates

Global Outdoor Power Equipment Market Breakdown by Power Source

Global Outdoor Power Equipment Market by Power Source

USD Billion; 2016-2025E

CAGR	Total	Gas-driven	Corded	Cordless	Parts & Attachments
2016-2020	5.6%	5.5%	4.9%	8.4%	3.8%
2020-2025E	5.3%	5.0%	4.4%	9.0%	2.8%
2016-2025E	5.4%	5.2%	4.6%	8.7%	3.2%



Note: The market size refers to the sum of revenue generated by outdoor power equipment companies.

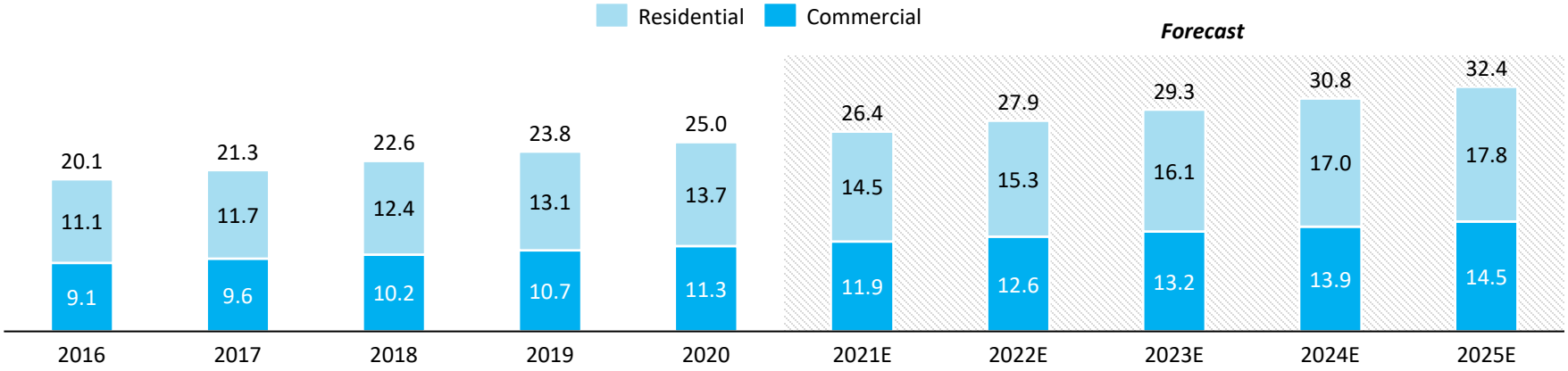
- Throughout the history of outdoor power equipment, traditional gas-driven outdoor equipment occupied a relatively large market share and increased from approximately USD13.4 billion in 2016 to USD16.6 billion in 2020 with a CAGR of 5.5%. As the technology advances, cordless outdoor power equipment demonstrated its environment-friendly advantages and competitive performance by a market-leading CAGR of 8.4% during the period of 2016 and 2020. Additionally, worldwide awareness of climate change further pushed corded electric and cordless outdoor power equipment to scale up from approximately USD0.9 billion and approximately USD2.6 billion to approximately USD1.1 billion and approximately USD3.6 billion through 2016 to 2020, respectively. In the next five years, cordless outdoor power equipment is expected to continue its robust growth with a CAGR of 9.0% and reach approximately USD5.6 billion in 2025.

Source: Frost & Sullivan Analysis and Estimates

Global Outdoor Power Equipment Market Breakdown by Segment

Global Outdoor Power Equipment Market by Segment
USD Billion; 2016-2025E

CAGR	Total	Residential	Commercial
2016-2020	5.6%	5.6%	5.6%
2020-2025E	5.3%	5.4%	5.2%
2016-2025E	5.4%	5.5%	5.4%



Note: The market size refers to the sum of revenue generated by outdoor power equipment companies.

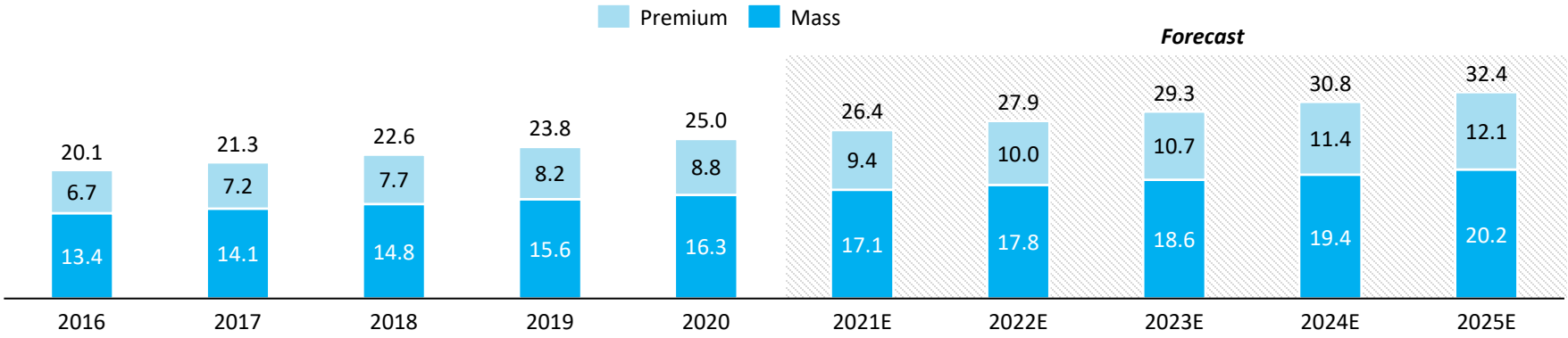
- Riding the wave of global urbanization, the residential and commercial outdoor power equipment segments demonstrated similar growth trend over the past 5 years and are anticipated to follow such growing trend going forward. Firstly, developing countries' outdoor power equipment market, mostly in the commercial segment, burgeoned at a growing trend, with relatively a small market share compared to the developed countries. Meanwhile, in developed regions like Europe and NA, the growth largely lied in the consumer segment. From 2016 to 2020, the residential segment increased from approximately USD11.1 billion to approximately USD13.7 billion with a CAGR of 5.6%. Likewise, the commercial segment rose from approximately USD9.1 billion to approximately USD11.3 billion during the same period at a CAGR of 5.6%.

Source: Frost & Sullivan Analysis and Estimates

Global Outdoor Power Equipment Market Breakdown by Category

Global Outdoor Power Equipment Market by Category
USD Billion; 2016-2025E

CAGR	Total	Premium	Mass
2016-2020	5.6%	6.8%	5.0%
2020-2025E	5.3%	6.7%	4.5%
2016-2025E	5.4%	6.8%	4.7%



Note: The market size refers to the sum of revenue generated by outdoor power equipment companies. Premium OPE is generally sold at or above the 30% highest price ranges for the same products

- The premium outdoor power equipment ("OPE") is normally designed to maintain and clean lager public areas, homes or yards for both residential and commercial users. Between 2016 and 2020, driven by the increasing market demands for high-end features or technologies such as the Bluetooth connectivity and USB charging port of the mowers, the premium outdoor power equipment products grow at CAGR of approximately 6.8%, increasing from approximately USD6.7 billion to approximately USD8.8 billion and accounting for approximately 35.0% of global outdoor power equipment market in 2020. Along with the significant resources devoted by global OPE manufactures to create premium product offerings, the premium OPE is forecasted to grow at CAGR of approximately 6.7% since 2020, and reached approximately USD12.1 billion in 2025. In addition, the OPE product targeting mass market is normally used to clean and maintain moderately sized homes or yards, which reached approximately USD16.3 billion in 2020 and is projected to reach approximately USD20.2 billion in 2025.

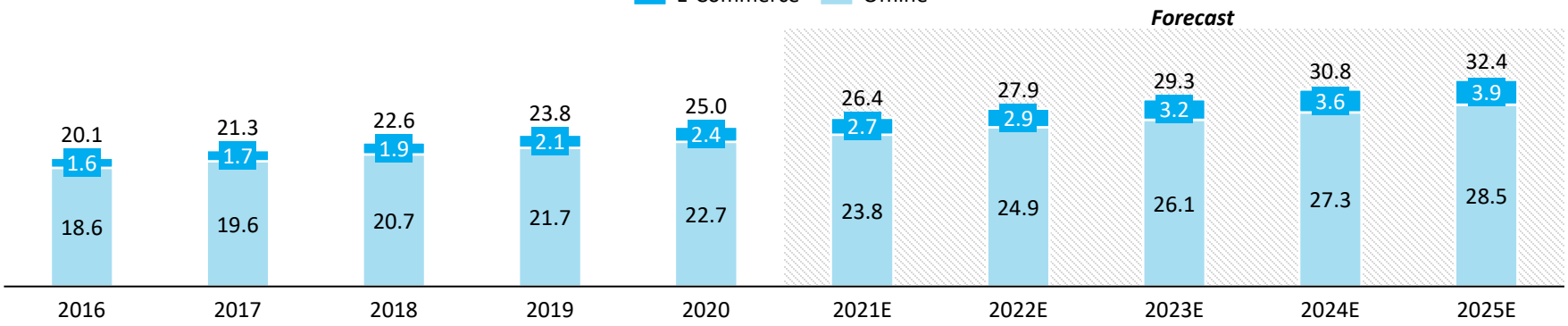
Source: Frost & Sullivan Analysis and Estimates

Global Outdoor Power Equipment Market Breakdown by Channel

Global Outdoor Power Equipment Market by Channel

USD Billion; 2016-2025E

CAGR	Total	E-Commerce	Offline
2016-2020	5.6%	11.2%	5.1%
2020-2025E	5.3%	10.2%	4.7%
2016-2025E	5.4%	10.7%	4.9%



Note: The market size refers to the sum of revenue generated by outdoor power equipment companies. The market size of e-commerce refers to the sum of revenue generated by online retailers, excluding the revenue generated through the online channels of the offline retailers.

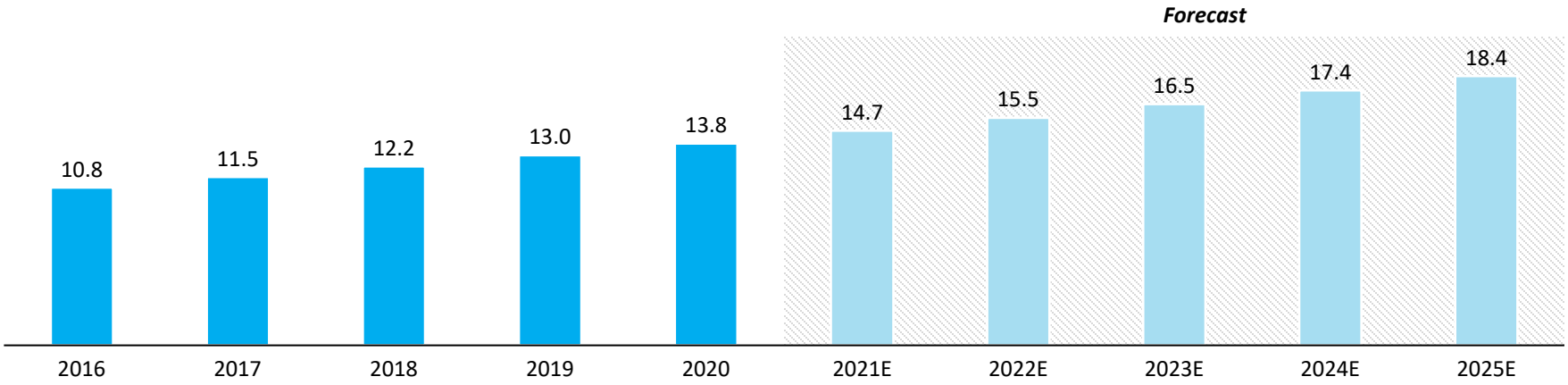
- Traditionally, outdoor power equipment is distributed mostly through KA and dealer channels. Over the past five years, KA and dealer channels contributed more than 90.0% of the global outdoor power equipment market. However, with the escalating proliferation of e-commerce channels throughout the world, the online channel grew at a CAGR of 11.2% from 2016 to 2020. Even though the outdoor power equipment was principally sold through KA and dealer channels, with the global urbanization trend, more consumer-level users began to enter the outdoor power equipment market through online channels. In addition, the COVID-19 pandemic also posted positive impact on the online sales of outdoor power equipment. At the end of 2020, the sales of outdoor power equipment through offline channels and online channels reached approximately USD22.7 billion and approximately USD2.4 billion, respectively.

Source: Frost & Sullivan Analysis and Estimates

Outdoor Power Equipment Market (NA)

Outdoor Power Equipment Market, NA
USD Billion; 2016-2025E

CAGR	2016-2020	2020-2025E	2016-2025E
OPE Market	6.4%	5.9%	6.1%



Note: The market size refers to the sum of revenue generated by outdoor power equipment companies.

- Between 2016 and 2020, the NA outdoor power equipment market surged from approximately USD10.8 billion to approximately USD13.8 billion. Firstly, NA has an relatively high ratio of urbanization which provides a unique environment for the outdoor power equipment. In parallel, residents in NA, to a large extent, have a higher level of income and long-term habit of gardening compared to other regions and countries. In addition, the demand for outdoor power equipment was stimulated further during the pandemic when people have more time to take care of their gardens and yards. By 2025, the outdoor power equipment market in North America is estimated to reach approximately USD18.4 billion.

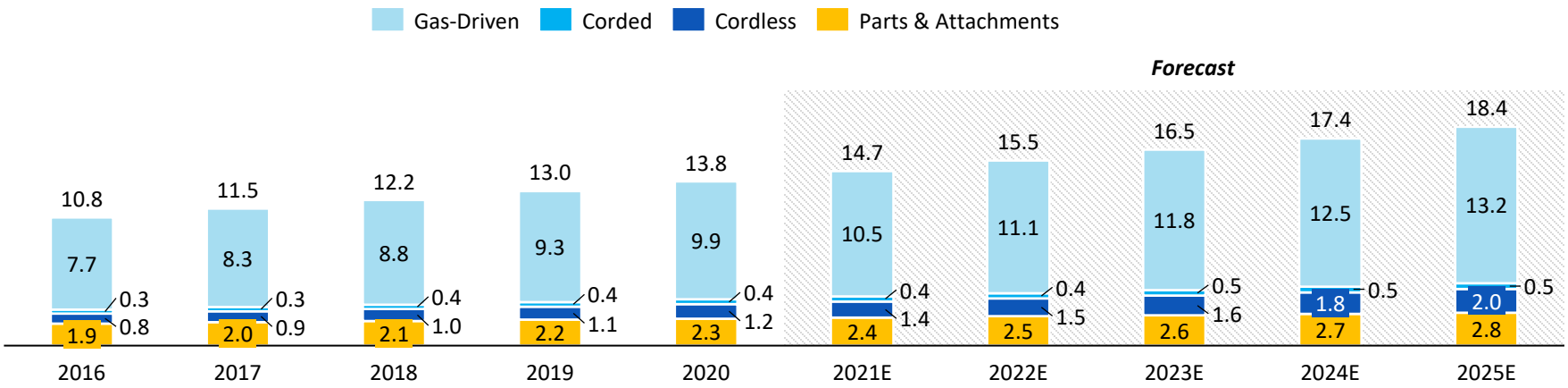
Source: Frost & Sullivan Analysis and Estimates

Outdoor Power Equipment Market by Power Source (NA)

Outdoor Power Equipment Market Breakdown by Power Source, NA

USD Billion; 2016-2025E

CAGR	Total	Gas-driven	Corded	Cordless	Parts & Attachments
2016-2020	6.4%	6.4%	4.6%	9.6%	5.1%
2020-2025E	5.9%	5.8%	4.1%	10.4%	4.0%
2016-2025E	6.1%	6.1%	4.3%	10.0%	4.5%



Note: The market size refers to the sum of revenue generated by outdoor power equipment companies.

- Despite market maturity, NA still account for the largest share of the growth worldwide between 2016 and 2020, demonstrating relatively fast growth rate at a CAGR of approximately 6.4% over the same period which is higher than that of the global market of approximately 5.6%, as many American consumers are active users of outdoor power equipment. The scale of outdoor power equipment market in NA is forecasted to reach approximately USD18.4 billion by 2025, accounting for approximately 56.8% of the global market. Besides, the gas-driven outdoor power equipment remains the majority of the demand in 2020 with a market share of approximately 71.8%, as gas-powered products continue to be the most practical way to power large mowers. Meanwhile, cordless equipment is project to further gain market share in NA, with the scale increasing from approximately USD0.8 billion to approximately USD1.2 billion and registering an CAGR of approximately 9.6% between 2016 and 2020. The improvement in cost structure, power, and run times enable increased penetration in both handheld and larger products, the cordless product is forecasted to grow at CARG of approximately 10.4% between 2020 and 2025 and reach approximately USD2.0 billion by 2025.

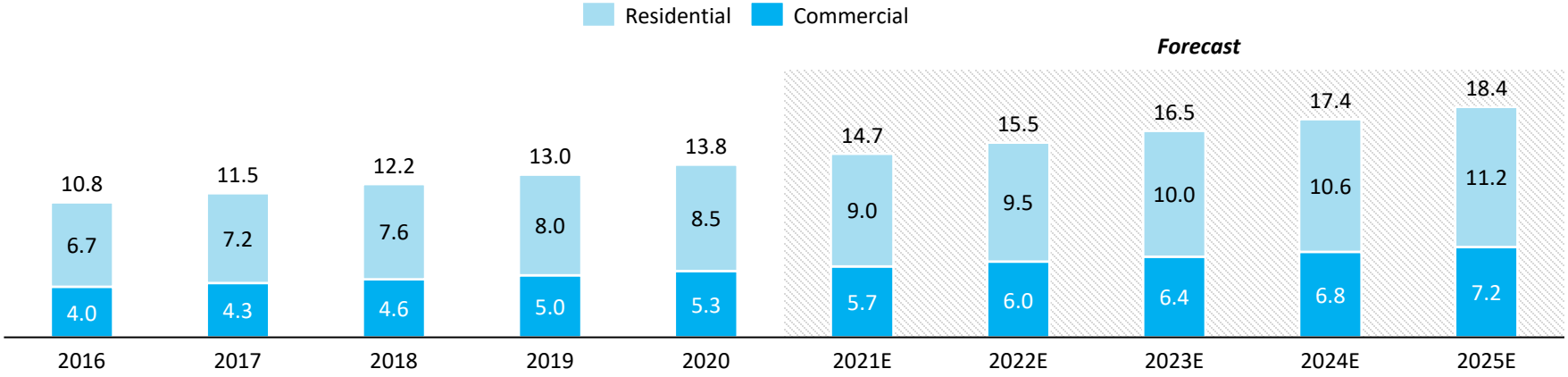
Source: Frost & Sullivan Analysis and Estimates

Outdoor Power Equipment Market by Segment (NA)

Outdoor Power Equipment Market Breakdown by Segment, NA

USD Billion; 2016-2025E

CAGR	Total	Residential	Commercial
2016-2020	6.4%	5.9%	7.1%
2020-2025E	5.9%	5.7%	6.3%
2016-2025E	6.1%	5.8%	6.7%



Note: The market size refers to the sum of revenue generated by outdoor power equipment companies.

- The outdoor power equipment in residential application in NA occupies a larger portion of approximately 61.5% with sales value reached approximately USD8.5 billion in 2020, indicating consumers' strong enthusiasm for gardening improvement products. Rising consumer spending and single-family housing construction are expected to continue to boost the segment growth and reach approximately USD11.2 billion by 2025. Meanwhile, the growth in commercial segment was mainly fueled by increased demand for commercial landscaping services, which typically provide lawn care needs of multifamily residences. Besides, the golf market is also expected to remain a major contributor to commercial power lawn and garden equipment sales. Between 2020 and 2025, the outdoor equipment in commercial segment is forecasted to grow at CAGR of approximately 6.3% and reach approximately USD7.2 billion by 2025.

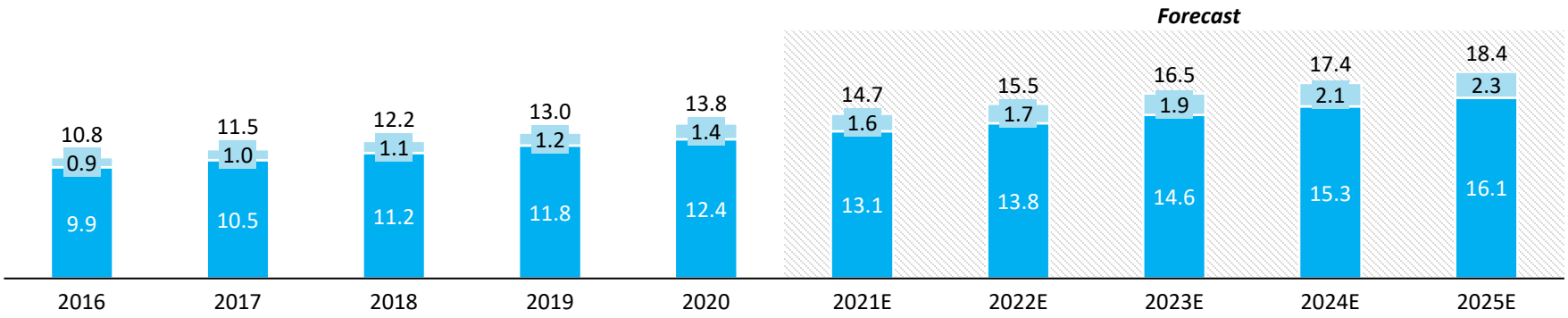
Source: Frost & Sullivan Analysis and Estimates

Outdoor Power Equipment Market Breakdown by Channel (NA)

Outdoor Power Equipment Market Breakdown by Channel, NA

USD Billion; 2016-2025E

CAGR	Total	E-commerce	Offline
2016-2020	6.4%	12.1%	5.8%
2020-2025E	5.9%	10.7%	5.3%
2016-2025E	6.1%	11.3%	5.5%



Note: The market size refers to the sum of revenue generated by outdoor power equipment companies. The market size of e-commerce refers to the sum of revenue generated by online retailers, excluding the revenue generated through the online channels of the offline retailers.

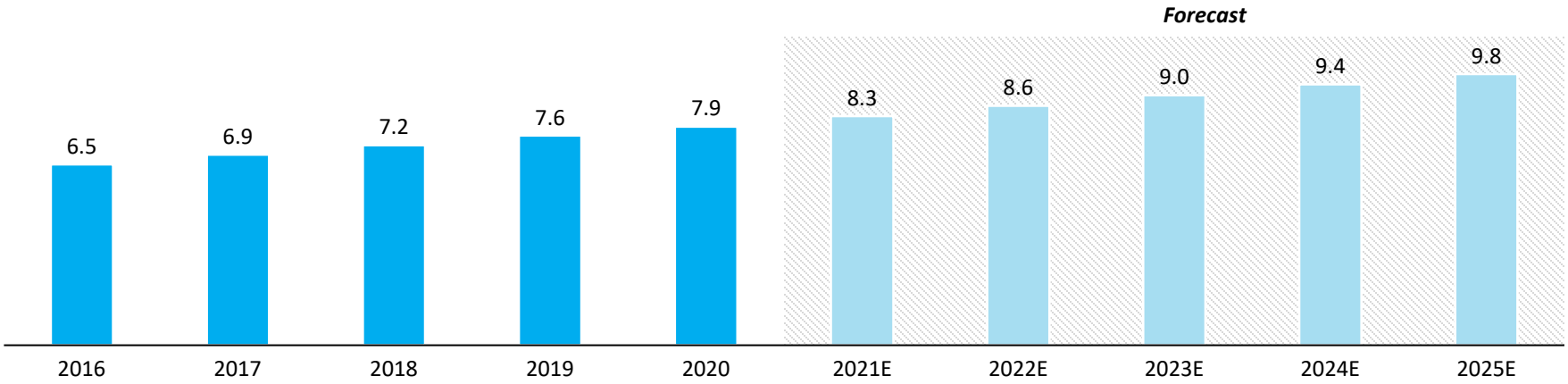
- Offline channels, mainly include national retailors such as the Home Deport and Lowe's, served as the main distribution channel for the sales of outdoor power equipment. Between 2016 and 2020, the sales revenue generated through offline channel increased from approximately USD9.9 billion to approximately USD12.4 billion, yielding a CAGR of approximately 5.8% and accounting for approximately 89.9% of the total market in 2020. Meanwhile, the manufacturers and distributors of outdoor power equipment in NA gradually place strong emphasis on the significance of online channel due to the emergence of online conglomerates such as Amazon, especially the COVID-19 epidemic has substantially affected consumers' shopping habits to some extent and positively contributed the expansion on online channels. In this case, the sales revenue of outdoor power equipment generated through online channels experienced impressive growth at CAGR of approximately 12.1% between 2016 and 2020, and it is forecasted to grow at CAGR of approximately 10.7% between 2020 and 2025.

Source: Frost & Sullivan Analysis and Estimates

Outdoor Power Equipment Market (Europe)

Outdoor Power Equipment Market, Europe
USD Billion; 2016-2025E

CAGR	2016-2020	2020-2025E	2016-2025E
Europe	4.9%	4.4%	4.6%



Note: The market size refers to the sum of revenue generated by outdoor power equipment companies.

- Between 2016 and 2020, the sales of outdoor power equipment in Europe increased from approximately USD6.5 billion to approximately USD7.9 billion, yielding a CAGR of approximately 4.9% over the same period and accounting for approximately 31.5% of the overall market in 2020. Europe is expected to remain its second place in terms of market scale after North America for outdoor power equipment, owing to its relatively high disposable income level of residents and cultural enthusiasm for gardening care. By 2025, the sales of outdoor power equipment in Europe is expected to reached approximately USD9.8 billion, yielding a CAGR of approximately 4.4% between 2020 and 2025.

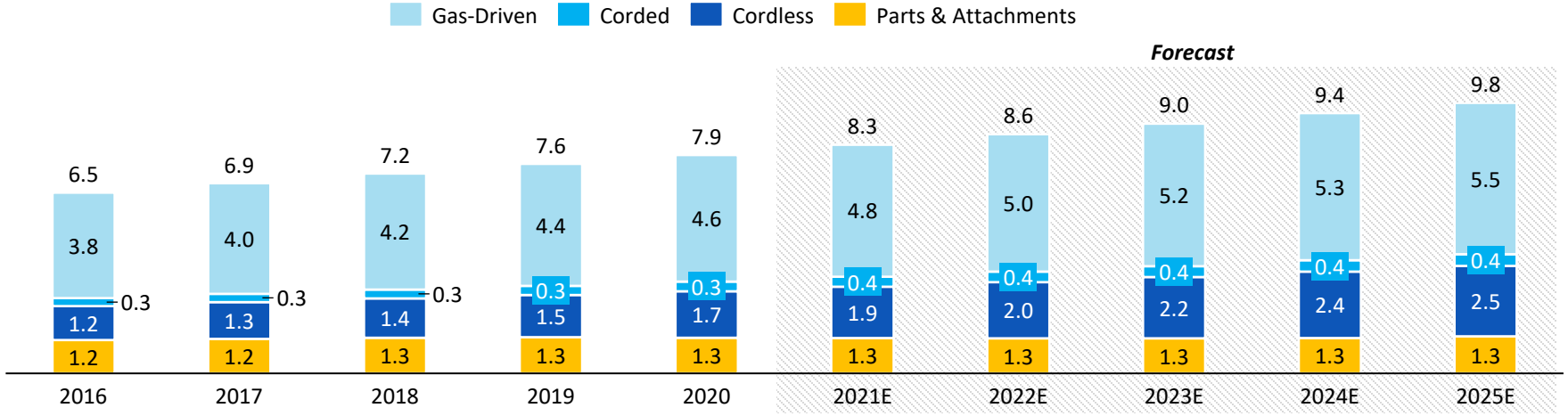
Source: Frost & Sullivan Analysis and Estimates

Outdoor Power Equipment Market Breakdown by Power Source (Europe)

Outdoor Power Equipment Market by Power Source, Europe

USD Billion; 2016-2025E

CAGR	Total	Gas-driven	Corded	Cordless	Parts & Attachments
2016-2020	4.9%	4.7%	4.4%	8.2%	1.7%
2020-2025E	4.4%	3.7%	4.2%	8.6%	0.8%
2016-2025E	4.6%	4.1%	4.3%	8.4%	1.2%



Note: The market size refers to the sum of revenue generated by outdoor power equipment companies.

- Europe, a leading region that early adopted the battery technology to the outdoor power equipment products, showed an upward trend with a CAGR of approximately 4.9% from 2016 to 2020 in the outdoor power equipment market, reaching approximately USD7.9 billion from approximately USD6.5 billion in 2016 over the past five years. Due to the mature market and development of the lithium-ion battery technology, the cordless outdoor power equipment rose from approximately USD1.2 billion to approximately USD1.7 billion with a CAGR of approximately 8.2% from 2016 to 2020. Nearly quintupling the market scale of corded electric outdoor power equipment in 2020, the cordless outdoor power equipment is anticipated to further increase with a CAGR of approximately 8.6%, reaching approximately USD2.5 billion by 2025 considering the fast technological development and application expansion of the lithium-ion battery.

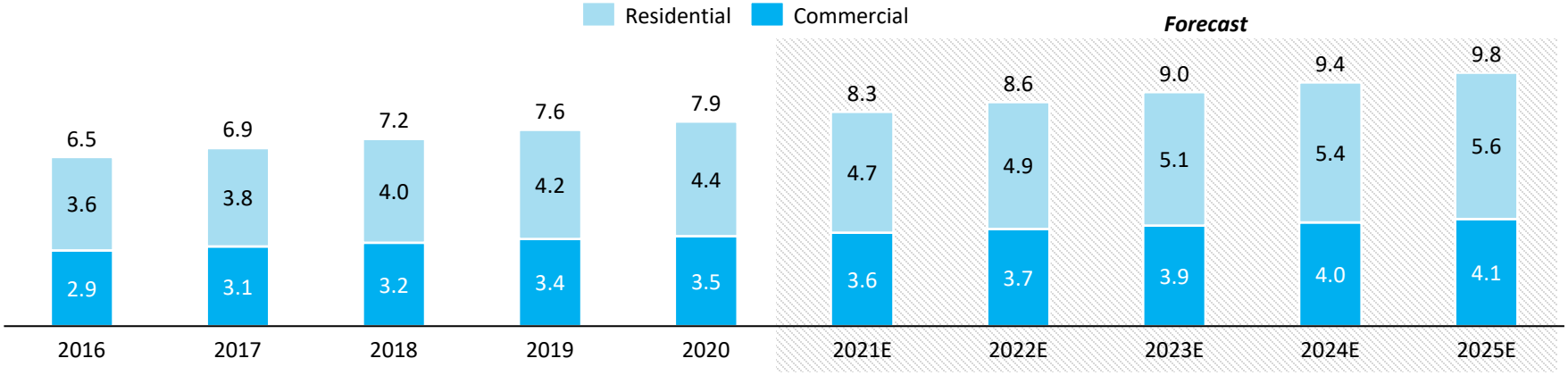
Source: Frost & Sullivan Analysis and Estimates

Outdoor Power Equipment Market Breakdown by Segment (Europe)

Outdoor Power Equipment Market Breakdown by Segment, Europe

USD Billion; 2016-2025E

CAGR	Total	Residential	Commercial
2016-2020	4.9%	5.2%	4.4%
2020-2025E	4.4%	5.0%	3.6%
2016-2025E	4.6%	5.1%	3.9%



Note: The market size refers to the sum of revenue generated by outdoor power equipment companies.

- Among all the European countries, the outdoor power equipment market growth was primarily driven by the residential segment which accounted for approximately 56.0% of the total outdoor power equipment market in 2020. Over the past five years, the residential segment increased from approximately USD3.6 billion in 2016 to approximately USD4.4 billion in 2020 at a CAGR of approximately 5.2%. Despite the pandemic which caused the economic downturn in 2020, Europeans' long-term habit of gardening contributed to the growth of outdoor power equipment in the residential segment and the trend is expected to sustain over the next five years. Statistically, residential segment is anticipated to reach approximately USD5.6 billion with a CAGR of approximately 5.0%. On the other hand, mainly impacted by the pandemic, the commercial segment was at a slightly lower growth rate of 4.4%, increasing from approximately USD2.9 billion in 2016 to approximately USD3.5 billion in 2020 and is expected to reach approximately USD4.1 billion by 2025.

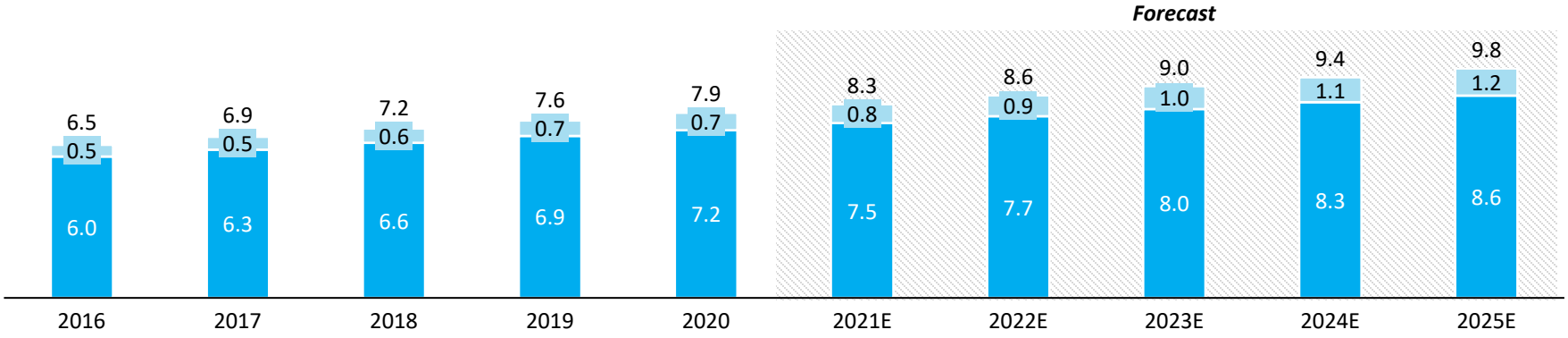
Source: Frost & Sullivan Analysis and Estimates

Outdoor Power Equipment Market Breakdown by Channel (Europe)

Outdoor Power Equipment Market by Channel, Europe

USD Billion; 2016-2025E

CAGR	Total	E-Commerce	Offline
2016-2020	4.9%	10.3%	4.4%
2020-2025E	4.4%	9.5%	3.8%
2016-2025E	4.6%	9.8%	4.1%



Note: The market size refers to the sum of revenue generated by outdoor power equipment companies. The market size of e-commerce refers to the sum of revenue generated by online retailers, excluding the revenue generated through the online channels of the offline retailers.

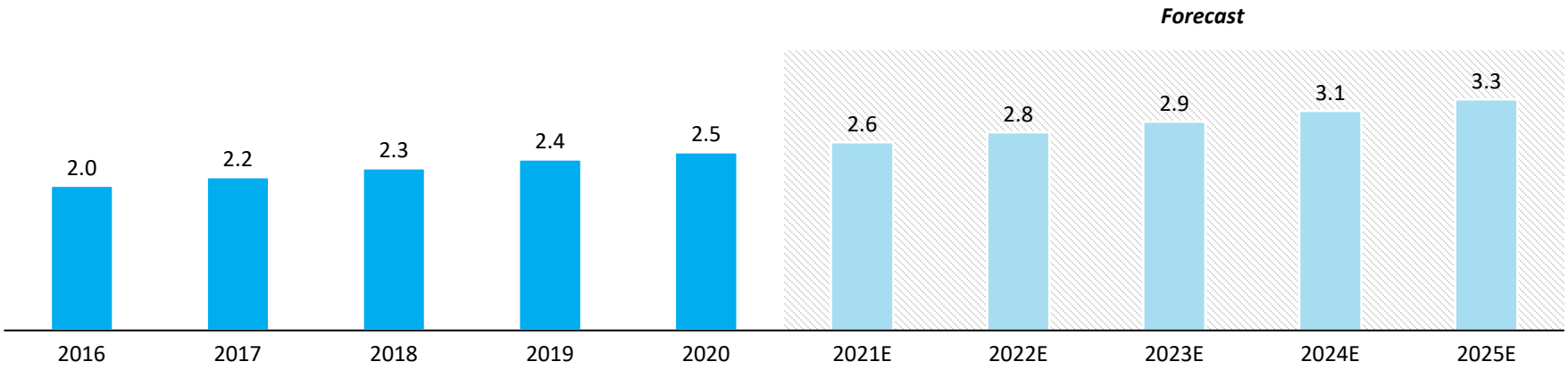
- With the proliferation of the e-commerce platform in Europe, the outdoor power equipment market growth was primarily driven by online channels with a CAGR of approximately 10.3% from 2016 to 2020. Accounting for approximately 90.7% of the total outdoor power equipment market together, offline channels mainly including KA and dealer channels in Europe showed a slower growth rate compared to the online channels, increasing from approximately USD6.0 billion to approximately USD7.2 billion at a CAGR of approximately 4.4% between 2016 and 2020. The quick rebound of the outdoor power equipment market during the pandemic demonstrated the shutdown and depression of the economy to be temporary. Thus, the sales generated through online channels is forecasted to benefit from the transition in the lifestyle of the Europeans and grow at a CAGR of approximately 9.5%, reaching approximately USD1.2 billion by 2025.

Source: Frost & Sullivan Analysis and Estimates

Outdoor Power Equipment Market (APAC)

Outdoor Power Equipment Market, APAC
USD Billion; 2016-2025E

CAGR	2016-2020	2020-2025E	2016-2025E
APAC	5.3%	5.4%	5.4%



Note: The market size refers to the sum of revenue generated by outdoor power equipment companies.

- In 2020, the market size of APAC outdoor power equipment market reached approximately USD2.5 billion, representing a moderate growth rate at CAGR of approximately 5.3% between 2016 and 2020 and accounting for approximately 10.0% of the global market. Australia and New Zealand are expected to continue to serve as significant driving force for the market due to their large average yard sizes and similar gardening culture to those in other developed economies. Besides, Chinese exporters of outdoor power equipment will continue to gain market share worldwide, leading to a widening of the APAC trade surplus through the following years. Meanwhile, growing demands for outdoor power equipment in APAC is mainly driven by industrial & professional applications, which accounted for approximately 74.7% of APAC market with the sales value reached approximately USD1.9 billion in 2020. In addition, the cordless outdoor power equipment segment accounted for the majority of the growth in APAC, representing a CAGR of approximately 7.6% between 2016 and 2020. By 2025, the outdoor power equipment market in APAC is expected to reach approximately USD3.3 billion, yielding a CAGR of approximately 5.4% between 2020 and 2025.

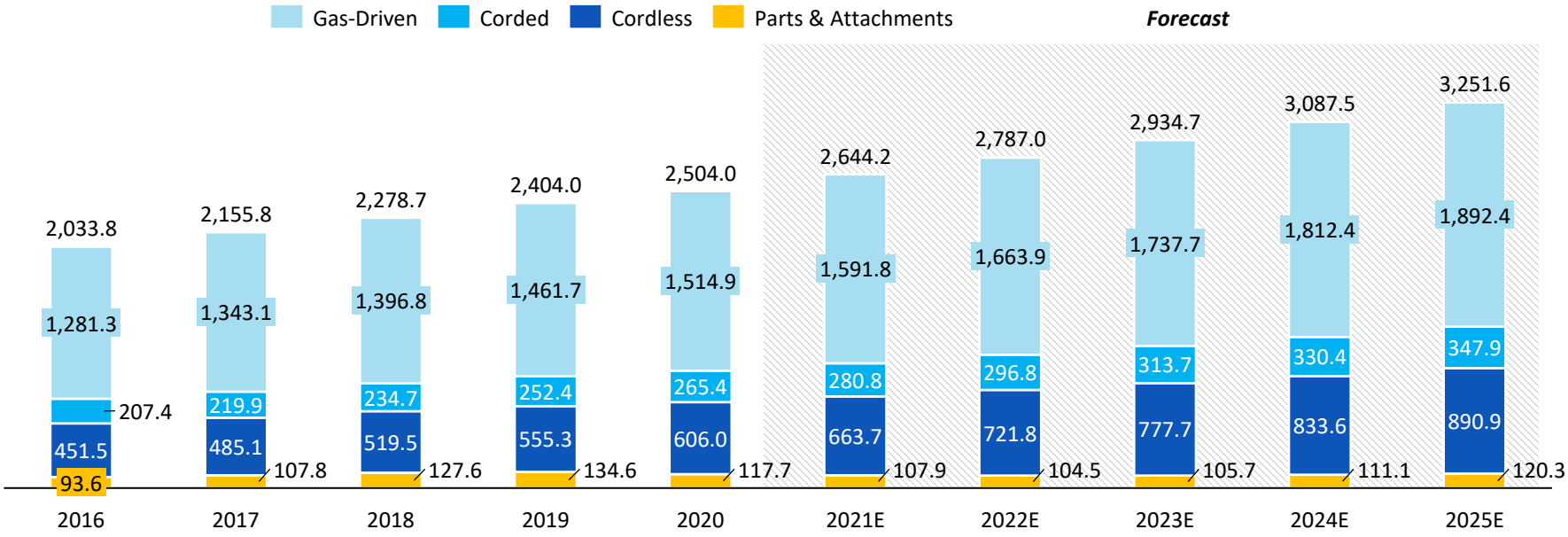
Source: Frost & Sullivan Analysis and Estimates

Outdoor Power Equipment Market Breakdown by Power Source (APAC)

Outdoor Power Equipment Market Breakdown by Power Source, APAC

USD Million; 2016-2025E

CAGR	Total	Gas-driven	Corded	Cordless	Parts & Attachments
2016-2020	5.3%	4.3%	6.4%	7.6%	5.9%
2020-2025E	5.4%	4.6%	5.6%	8.0%	0.4%
2016-2025E	5.4%	4.4%	5.9%	7.8%	2.8%



Note: The market size refers to the sum of revenue generated by outdoor power equipment companies.

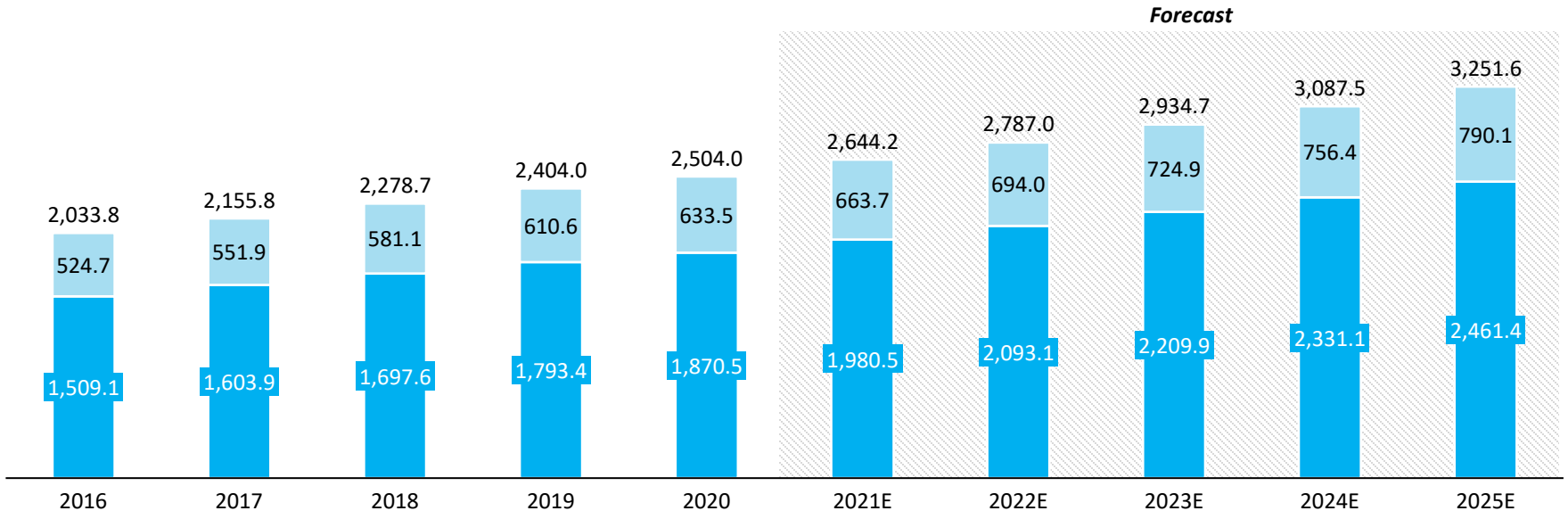
Source: Frost & Sullivan Analysis and Estimates

Outdoor Power Equipment Market by Segment (APAC)

Outdoor Power Equipment Market Breakdown by Segment, APAC

USD Million; 2016-2025E

CAGR	Total	Residential	Commercial
2016-2020	5.3%	4.8%	5.5%
2020-2025E	5.4%	4.5%	5.6%
2016-2025E	5.4%	4.7%	5.6%



Note: The market size refers to the sum of revenue generated by outdoor power equipment companies.

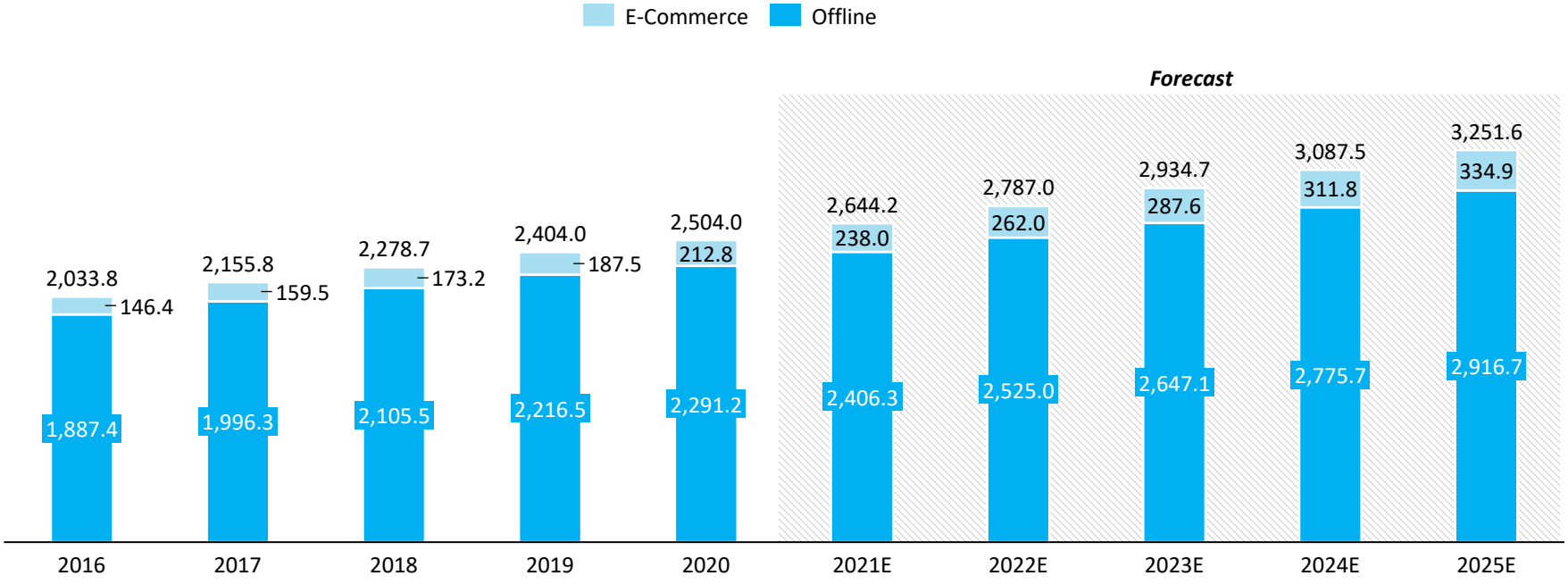
Source: Frost & Sullivan Analysis and Estimates

Outdoor Power Equipment Market Breakdown by Channel (APAC)

Outdoor Power Equipment Market Breakdown by Channel, APAC

USD Million; 2016-2025E

CAGR	Total	E-Commerce	Offline
2016-2020	5.3%	9.8%	5.0%
2020-2025E	5.4%	9.5%	4.9%
2016-2025E	5.4%	9.6%	5.0%



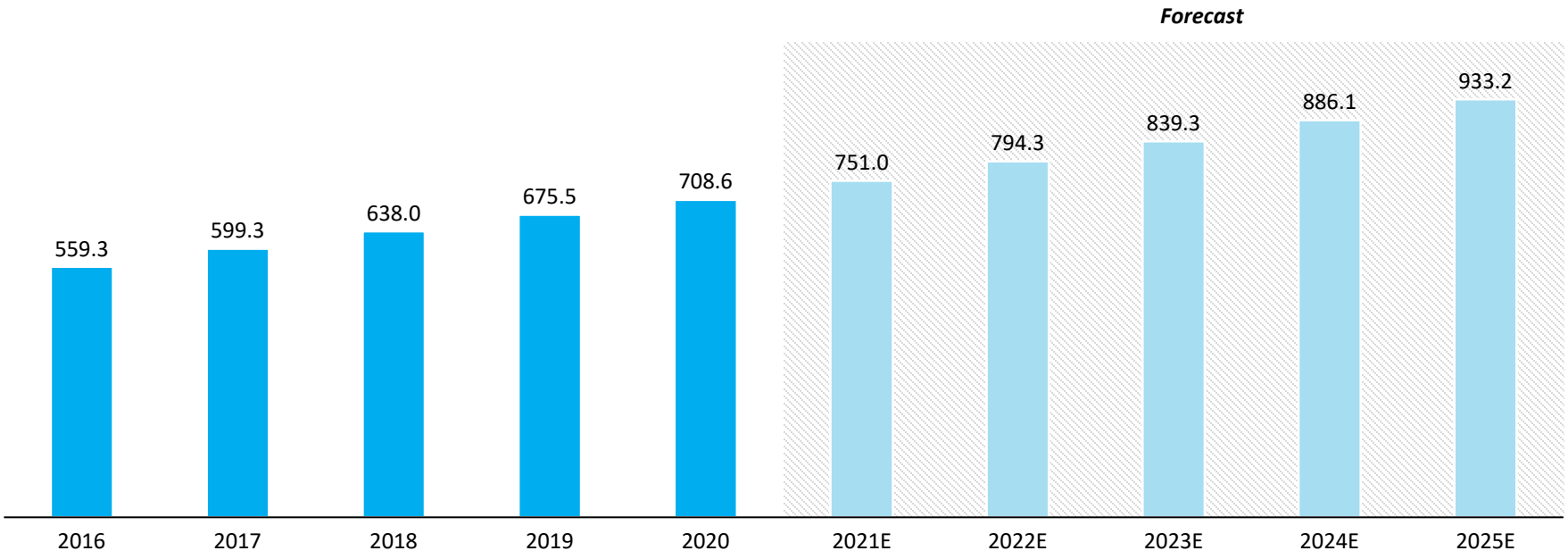
Note: The market size refers to the sum of revenue generated by outdoor power equipment companies. The market size of e-commerce refers to the sum of revenue generated by online retailers, excluding the revenue generated through the online channels of the offline retailers.

Source: Frost & Sullivan Analysis and Estimates

Outdoor Power Equipment Market (China)

Outdoor Power Equipment Market, China
USD Million; 2016-2025E

CAGR	2016-2020	2020-2025E	2016-2025E
China	6.1%	5.7%	5.9%



Note: The market size refers to the sum of revenue generated by outdoor power equipment companies.

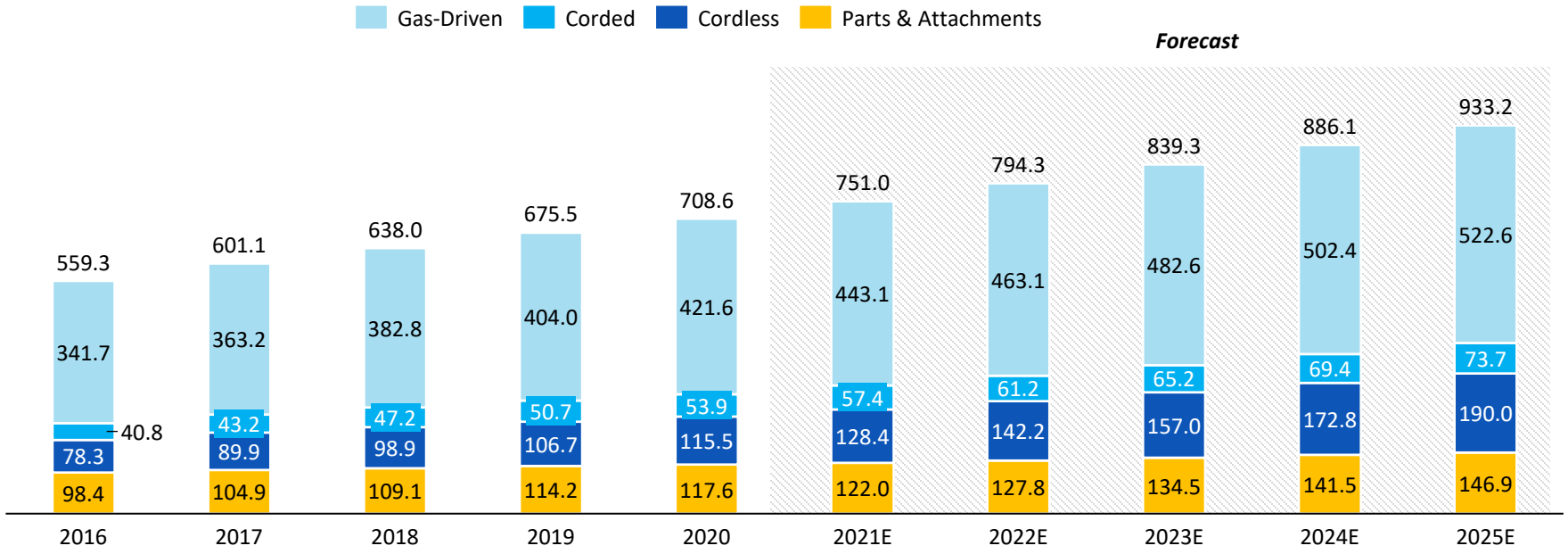
Source: Frost & Sullivan Analysis and Estimates

Outdoor Power Equipment Market Breakdown by Power Source (China)

Outdoor Power Equipment Market Breakdown by Power Source, China

USD Million; 2016-2025E

CAGR	Total	Gas-driven	Corded	Cordless	Parts & Attachments
2016-2020	6.1%	5.4%	7.2%	10.2%	4.6%
2020-2025E	5.7%	4.4%	6.5%	10.5%	4.5%
2016-2025E	5.9%	4.8%	6.8%	10.4%	4.5%



Note: The market size refers to the sum of revenue generated by outdoor power equipment companies.

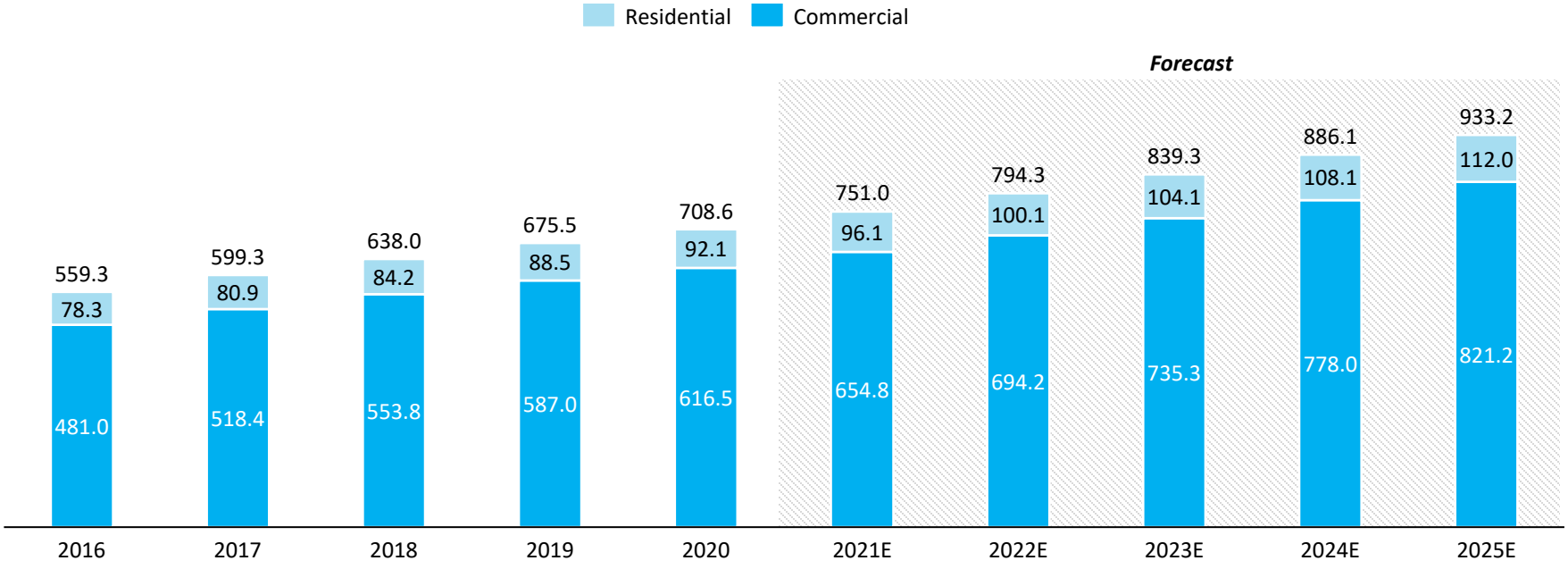
Source: Frost & Sullivan Analysis and Estimates

Outdoor Power Equipment Market by Segment (China)

Outdoor Power Equipment Market Breakdown by Segment, China

USD Million; 2016-2025E

CAGR	Total	Residential	Commercial
2016-2020	6.1%	4.1%	6.4%
2020-2025E	5.7%	4.0%	5.9%
2016-2025E	5.9%	4.1%	6.1%



Note: The market size refers to the sum of revenue generated by outdoor power equipment companies.

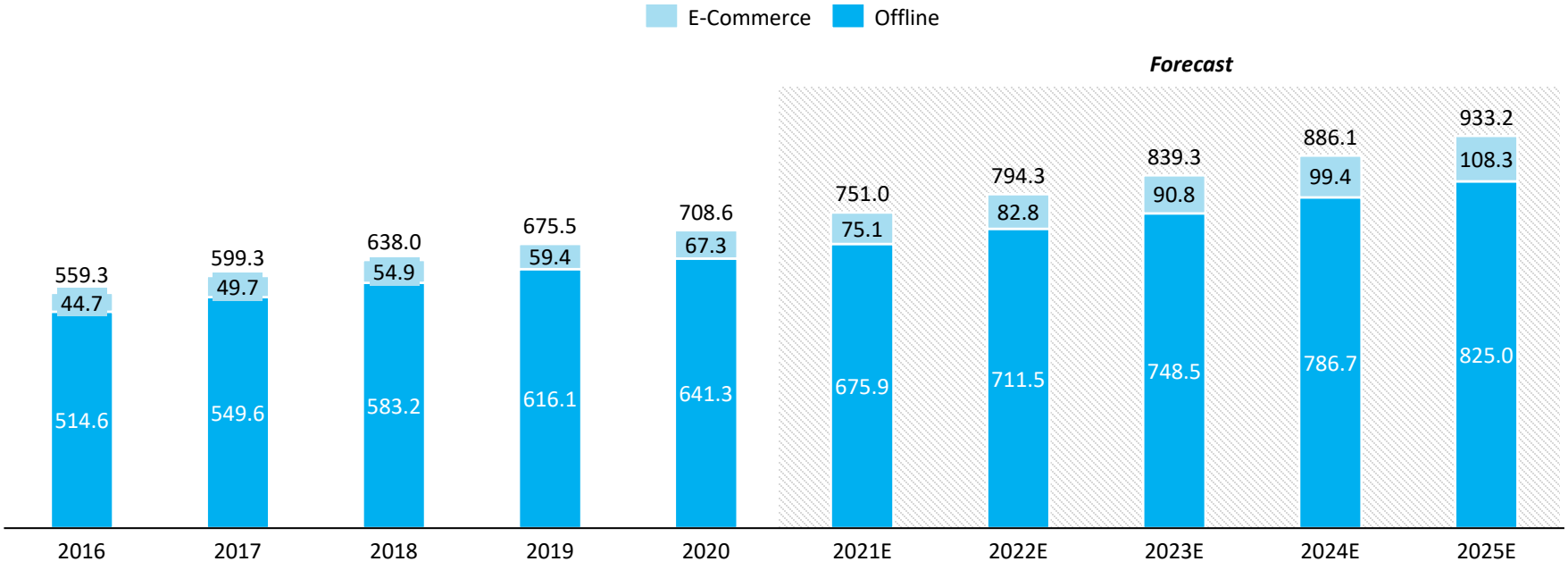
Source: Frost & Sullivan Analysis and Estimates

Outdoor Power Equipment Market Breakdown by Channel (China)

Outdoor Power Equipment Market Breakdown by Channel, China

USD Million; 2016-2025E

CAGR	Total	E-Commerce	Offline
2016-2020	6.1%	10.8%	5.7%
2020-2025E	5.7%	10.0%	5.2%
2016-2025E	5.9%	10.3%	5.4%



Note: The market size refers to the sum of revenue generated by outdoor power equipment companies. The market size of e-commerce refers to the sum of revenue generated by online retailers, excluding the revenue generated through the online channels of the offline retailers.

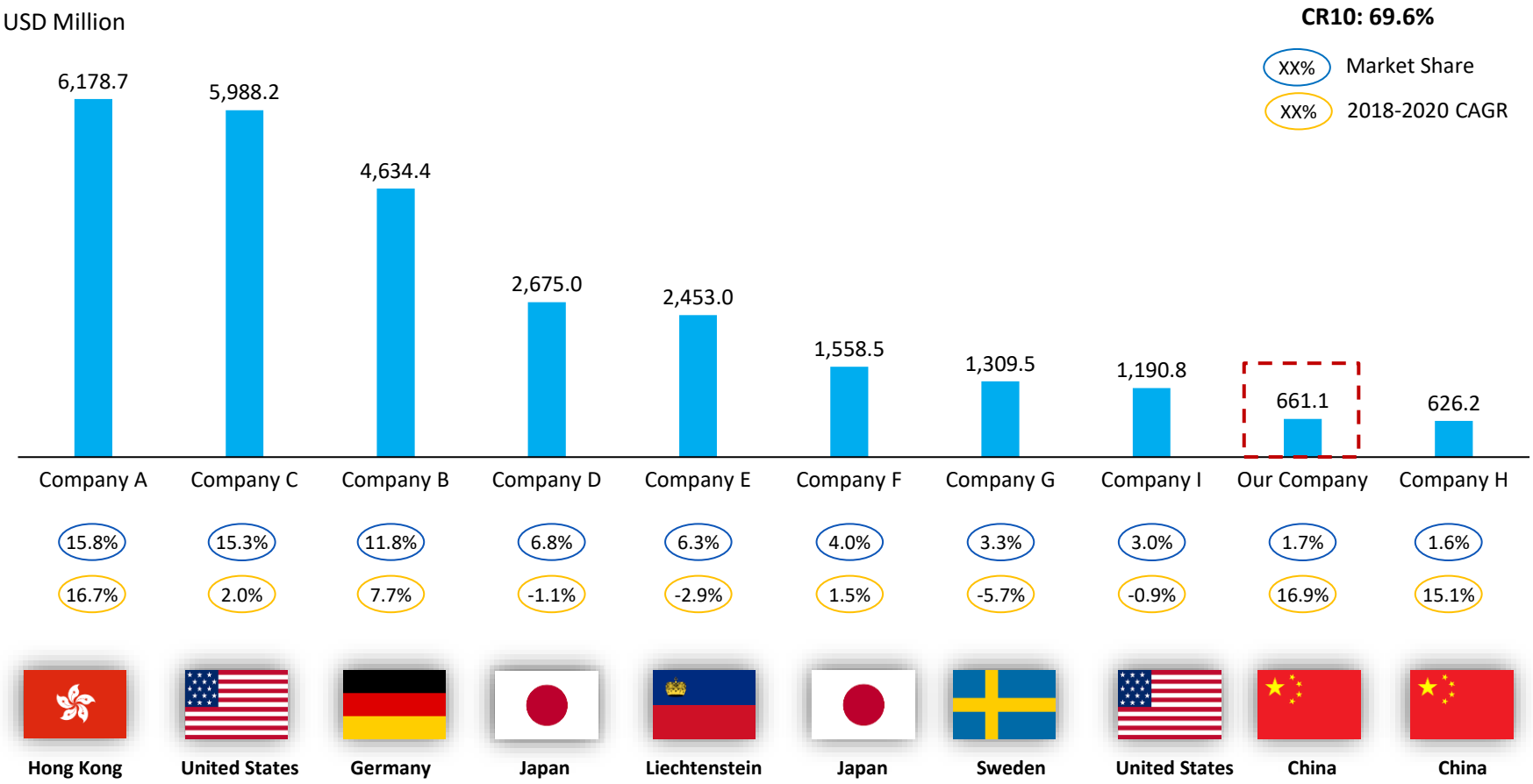
Source: Frost & Sullivan Analysis and Estimates

Agenda

1. Overview of Global Power Tool Market
2. Overview of Global Outdoor Power Equipment Market
3. Competitive Landscape Overview
4. Appendix

Ranking-1

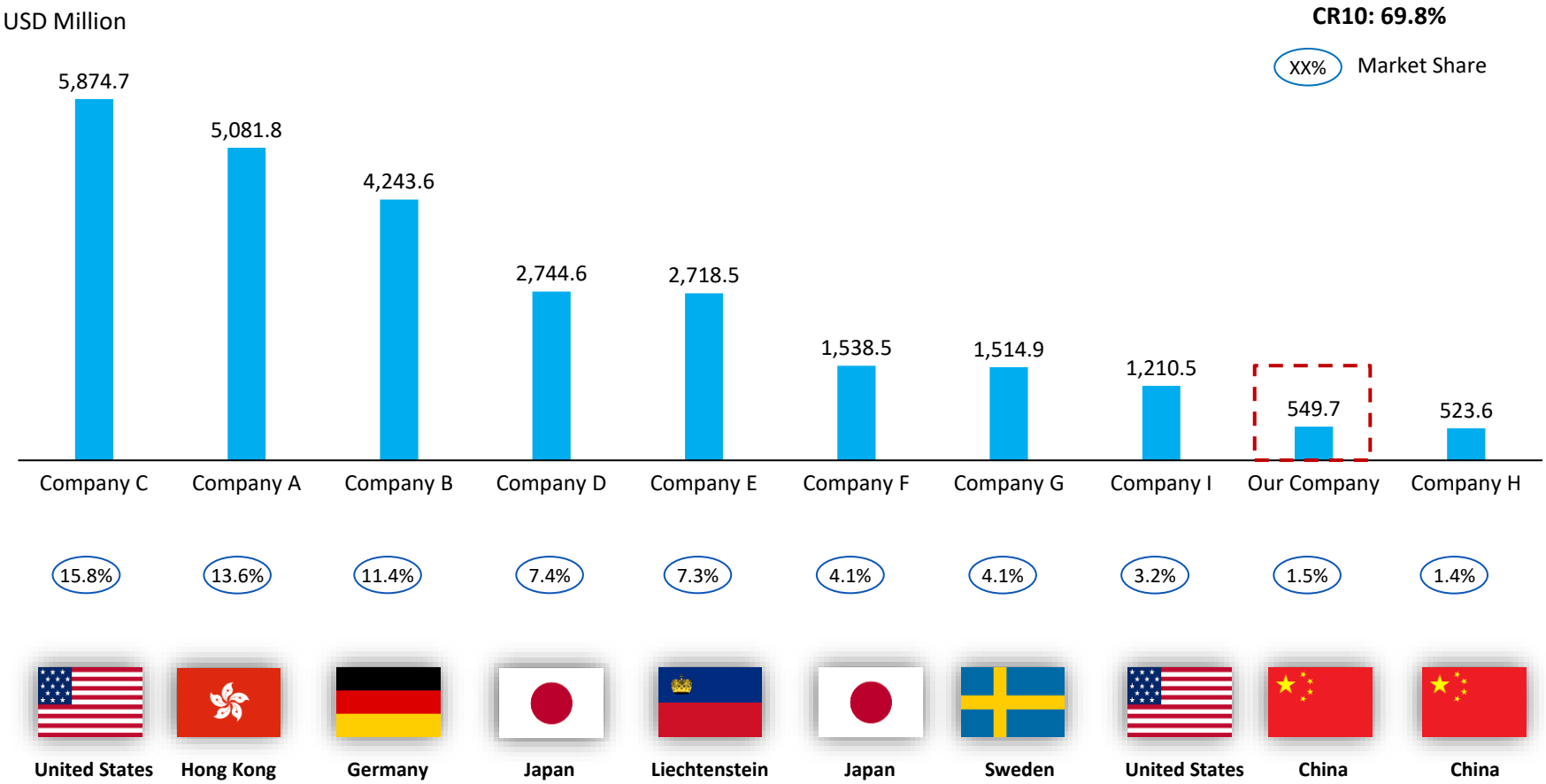
Ranking of the Leading Power Tool Companies by Revenue (Global), 2020



Source: Frost & Sullivan Analysis and Estimates

Ranking-2

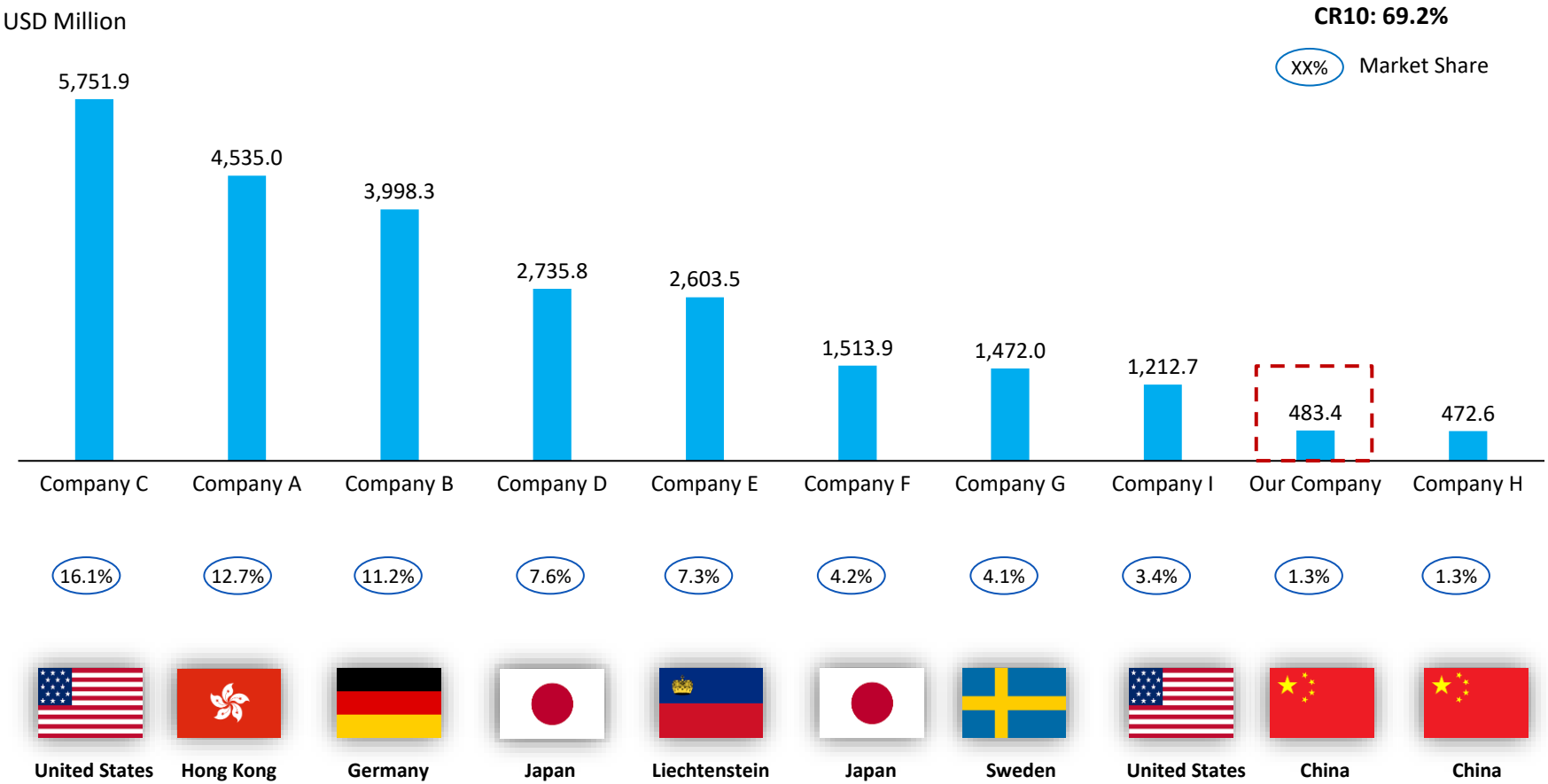
Ranking of the Leading Power Tool Companies by Revenue (Global), 2019



Source: Frost & Sullivan Analysis and Estimates

Ranking-3

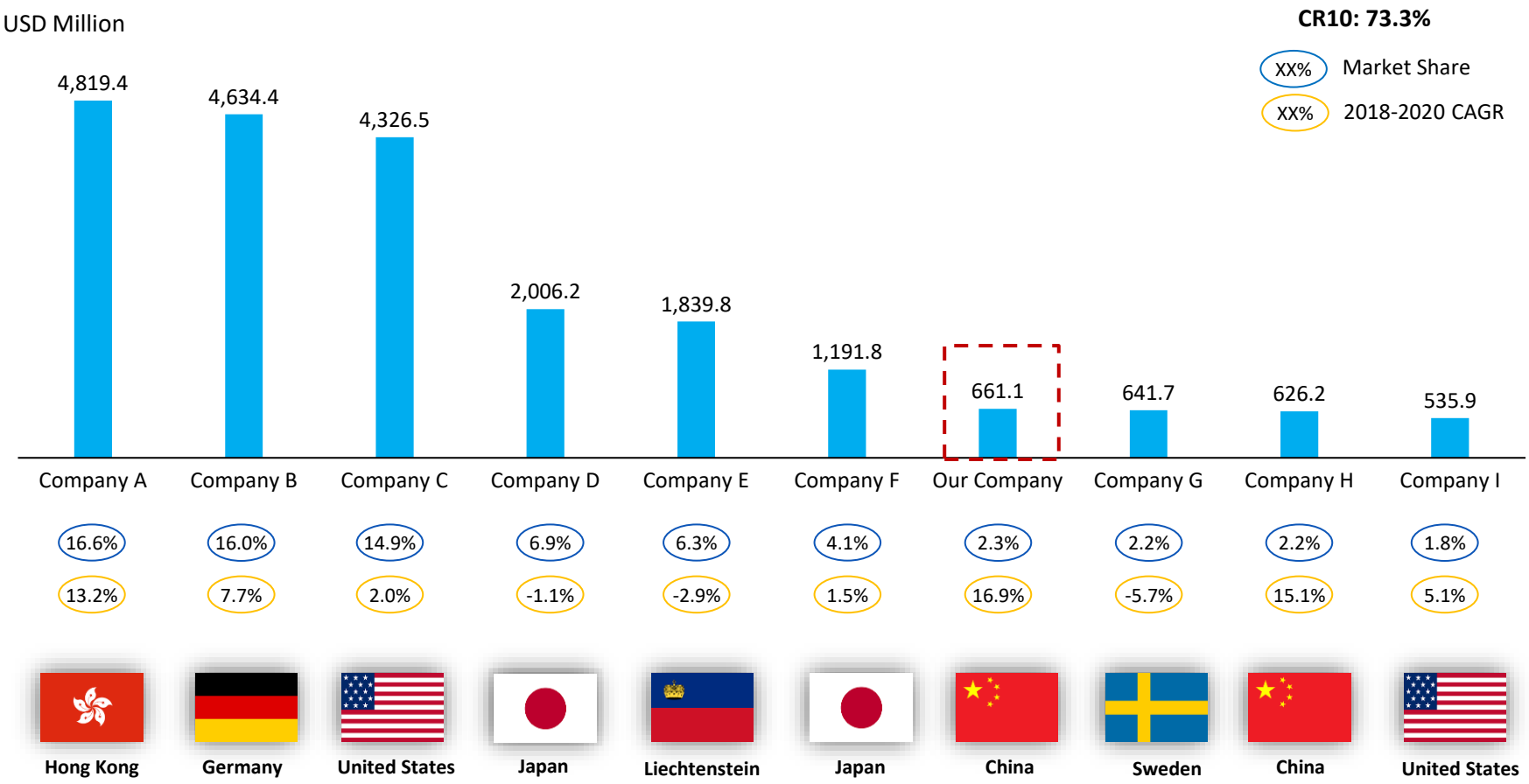
Ranking of the Leading Power Tool Companies by Revenue (Global), 2018



Source: Frost & Sullivan Analysis and Estimates

Ranking-4

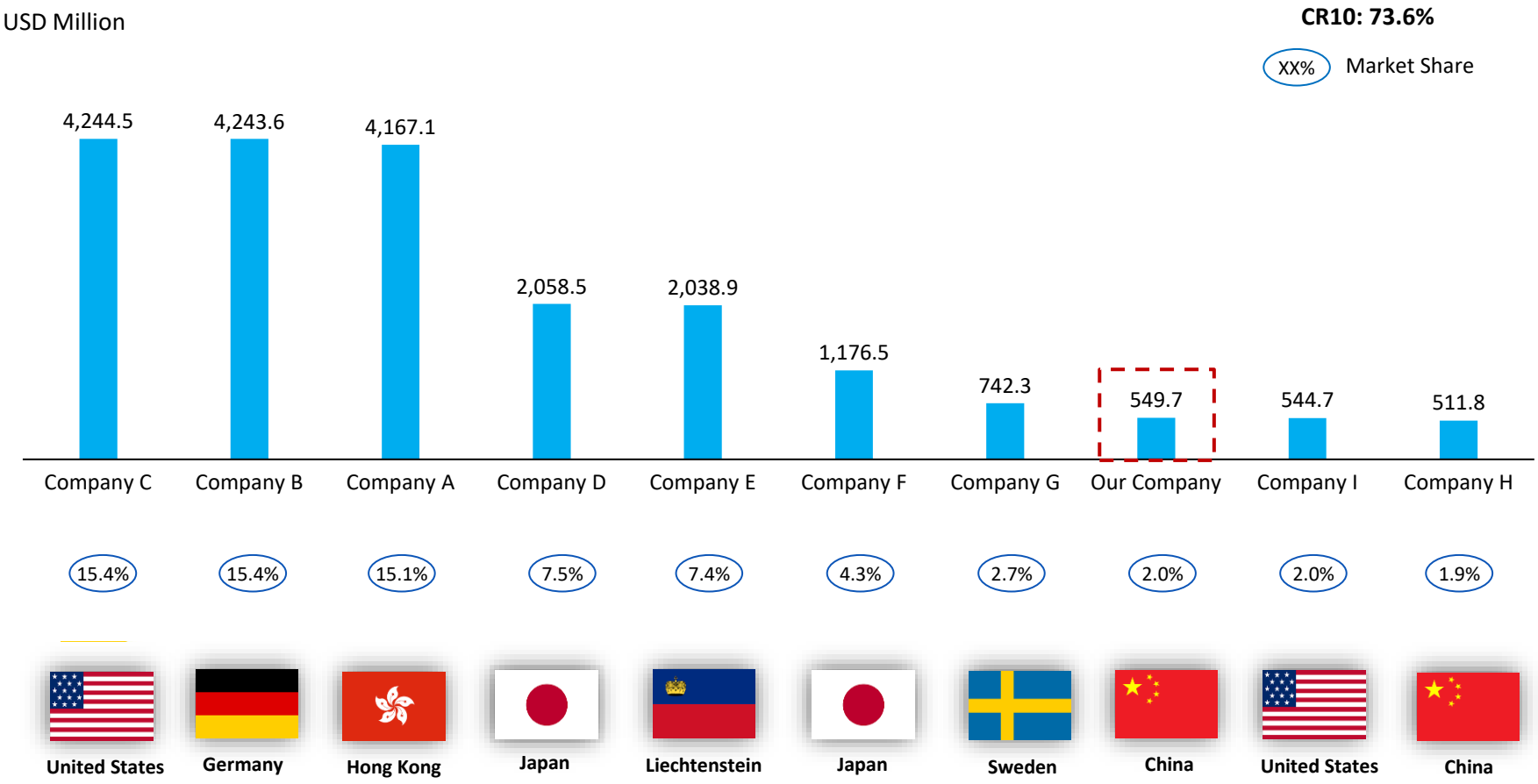
Ranking of the Leading Electric Power Tool Companies by Revenue (Global), 2020



Source: Frost & Sullivan Analysis and Estimates

Ranking-5

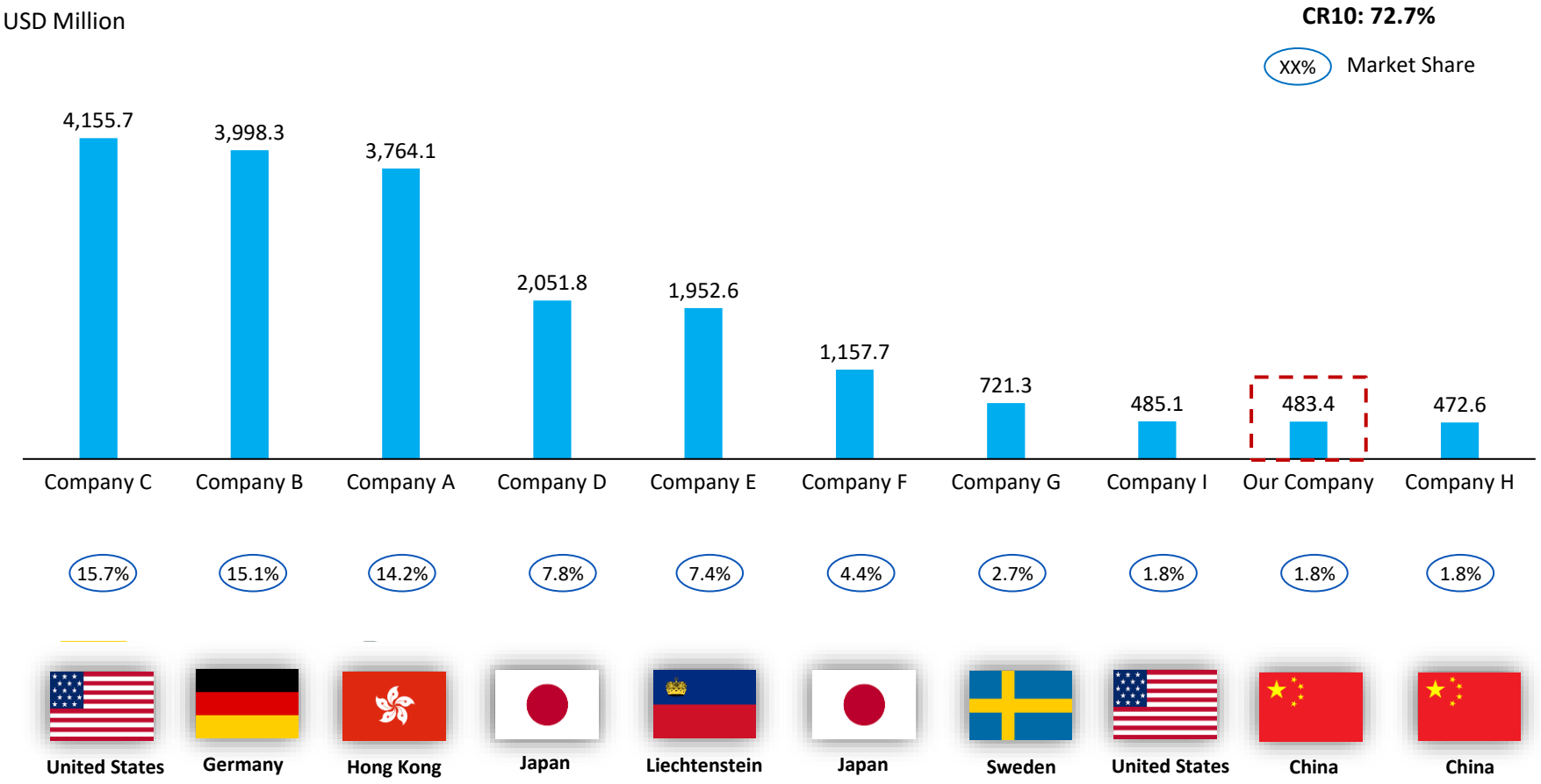
Ranking of the Leading Electric Power Tool Companies by Revenue (Global), 2019



Source: Frost & Sullivan Analysis and Estimates

Ranking-6

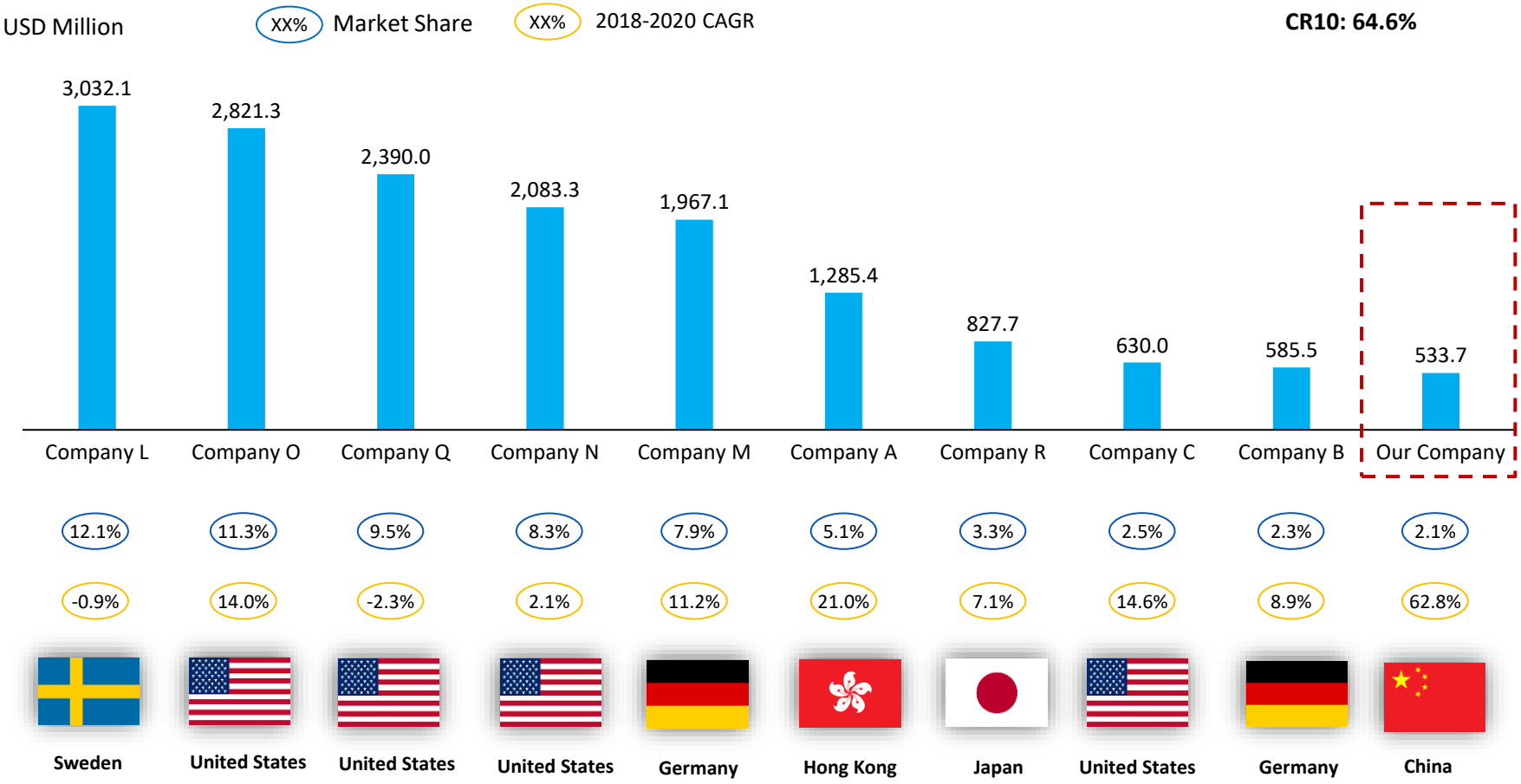
Ranking of the Leading Electric Power Tool Companies by Revenue (Global), 2018



Source: Frost & Sullivan Analysis and Estimates

Ranking-7

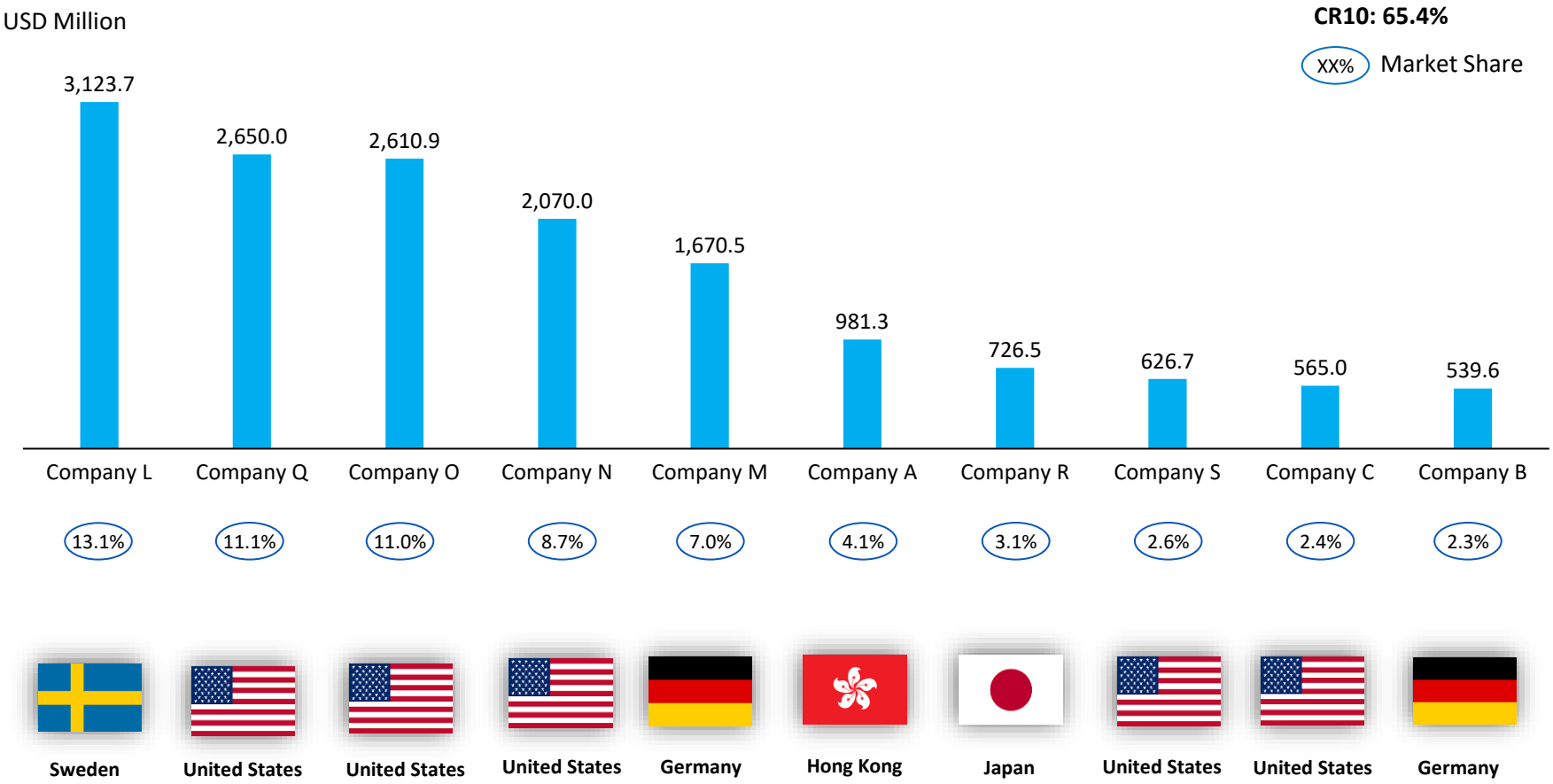
Ranking of the Leading Outdoor Power Equipment Companies by Revenue (Global), 2020



Source: Frost & Sullivan Analysis and Estimates

Ranking-8

Ranking of the Leading Outdoor Power Equipment Companies by Revenue (Global), 2019



Source: Frost & Sullivan Analysis and Estimates

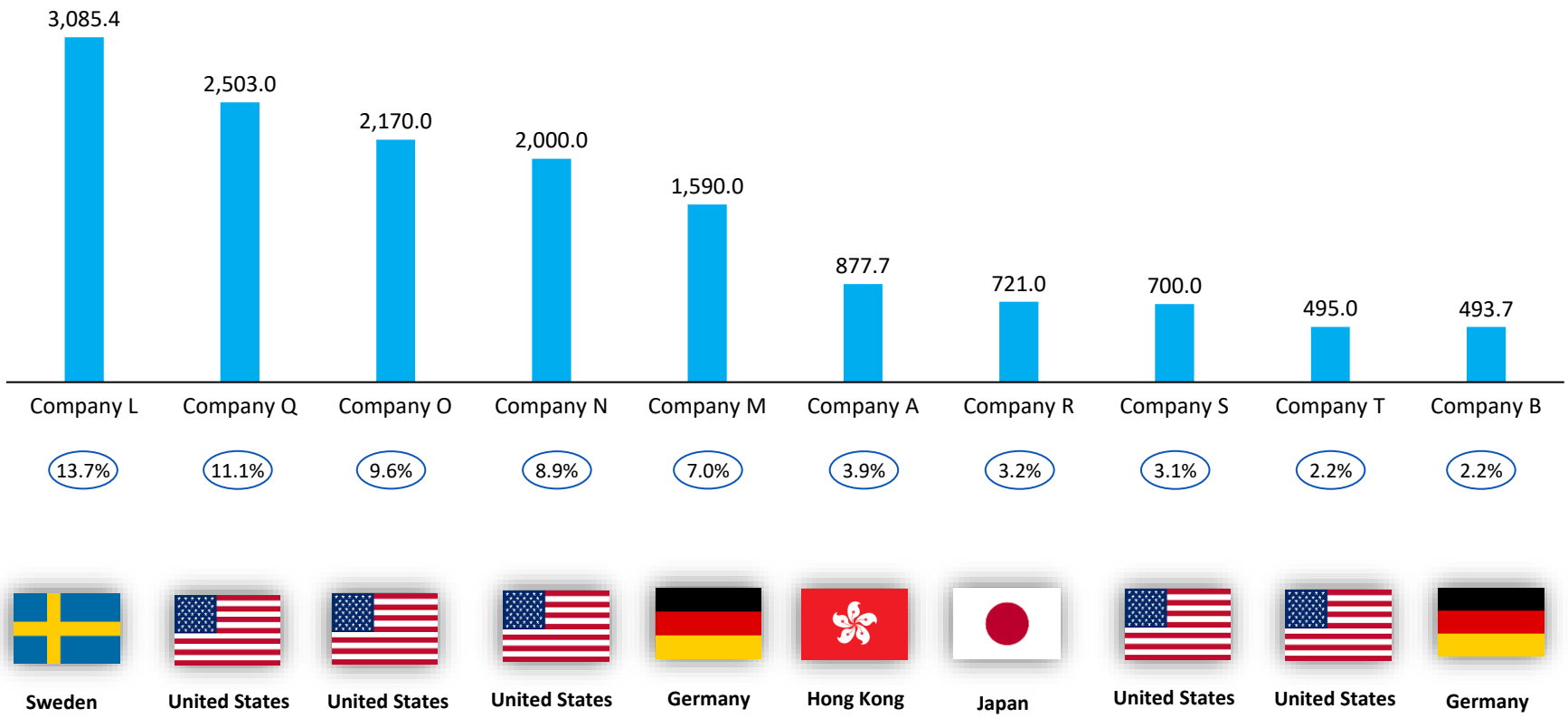
Ranking-9

Ranking of the Leading Outdoor Power Equipment Companies by Revenue (Global), 2018

USD Million

CR10: 61.5%

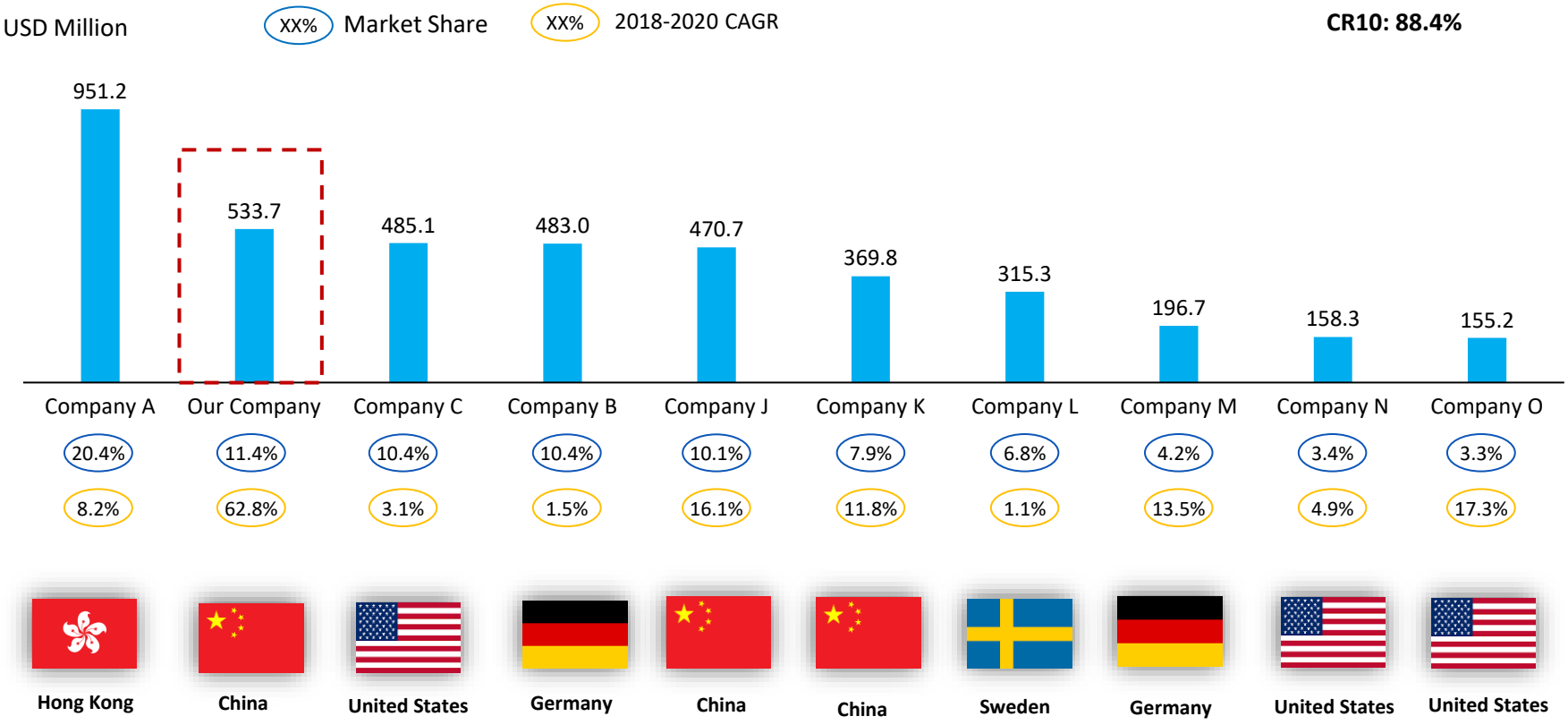
XX% Market Share



Source: Frost & Sullivan Analysis and Estimates

Ranking-10

Ranking of the Leading Electric Outdoor Power Equipment Companies by Revenue (Global), 2020

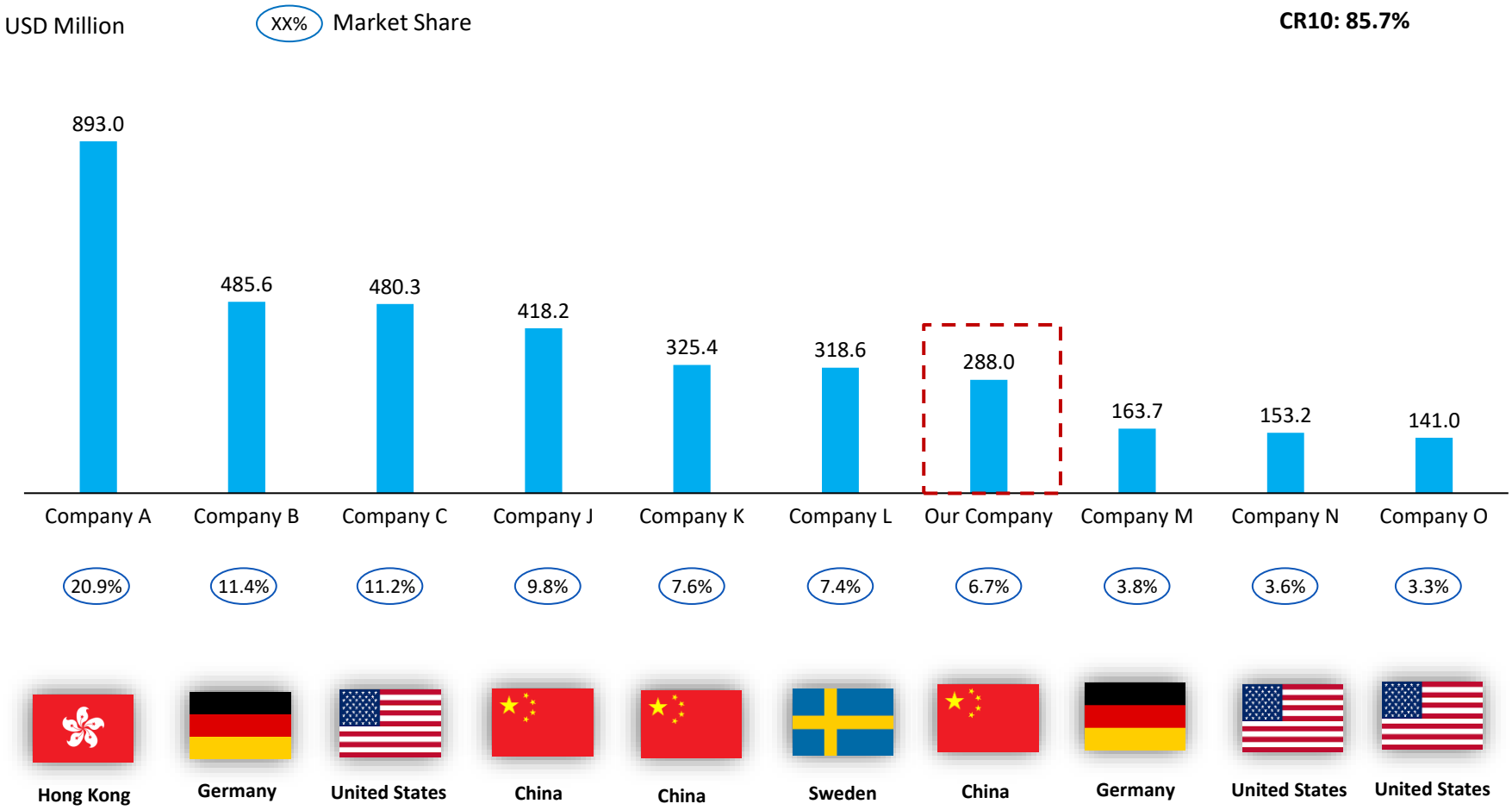


- As at the end of 2020, Chervon ranked the 2nd place in the global electric outdoor power equipment market with a revenue of approximately USD533.7 million and accounted a market share of approximately 11.4%. Besides, Chervon ranked the 1st place in terms of the CAGR of approximately 62.8% between 2018 and 2020 among the top 10 electric outdoor power equipment companies in the world.

Source: Frost & Sullivan Analysis and Estimates

Ranking-11

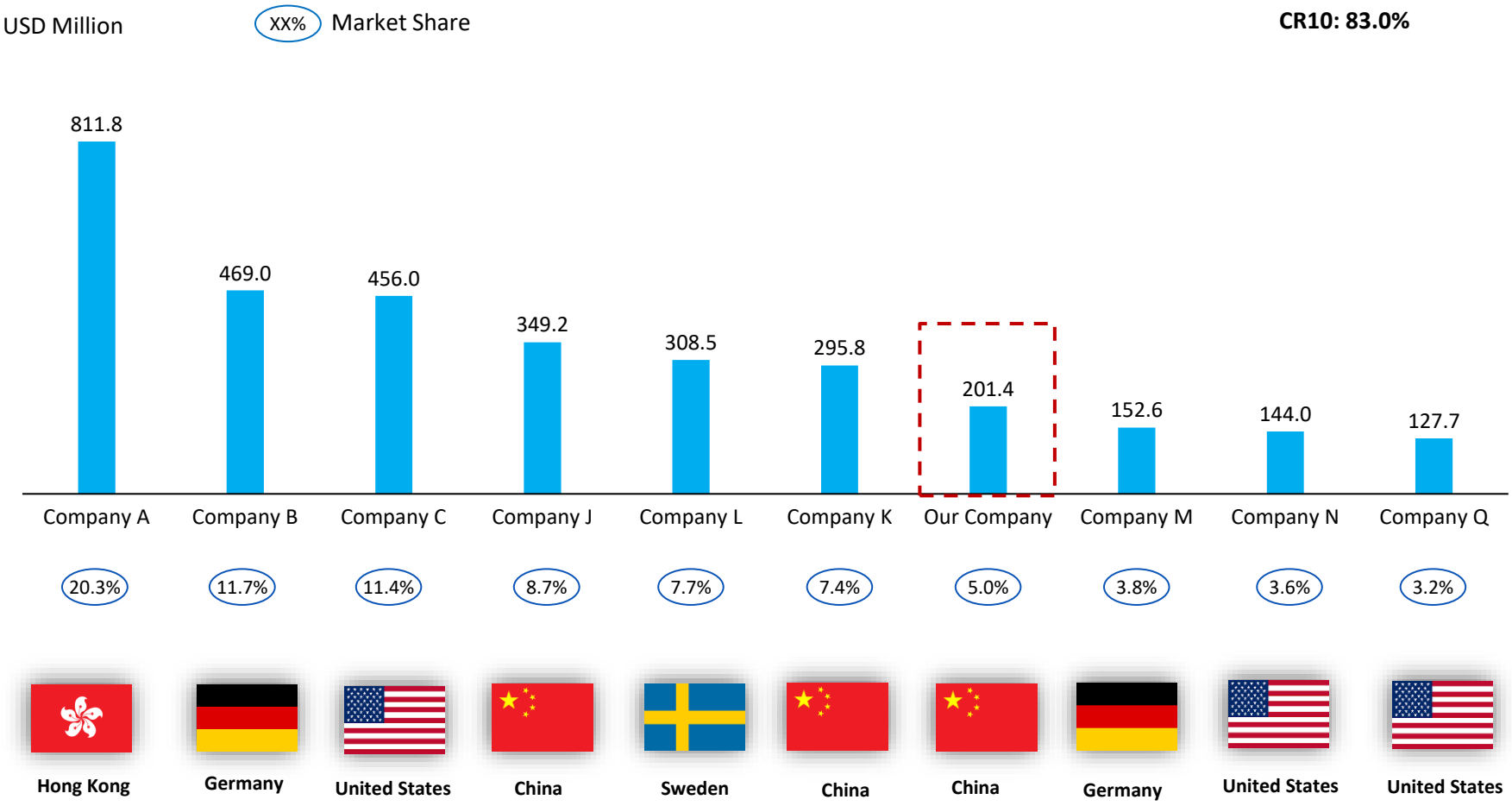
Ranking of the Leading Electric Outdoor Power Equipment Companies by Revenue (Global), 2019



Source: Frost & Sullivan Analysis and Estimates

Ranking-12

Ranking of the Leading Electric Outdoor Power Equipment Companies by Revenue (Global), 2018



Source: Frost & Sullivan Analysis and Estimates

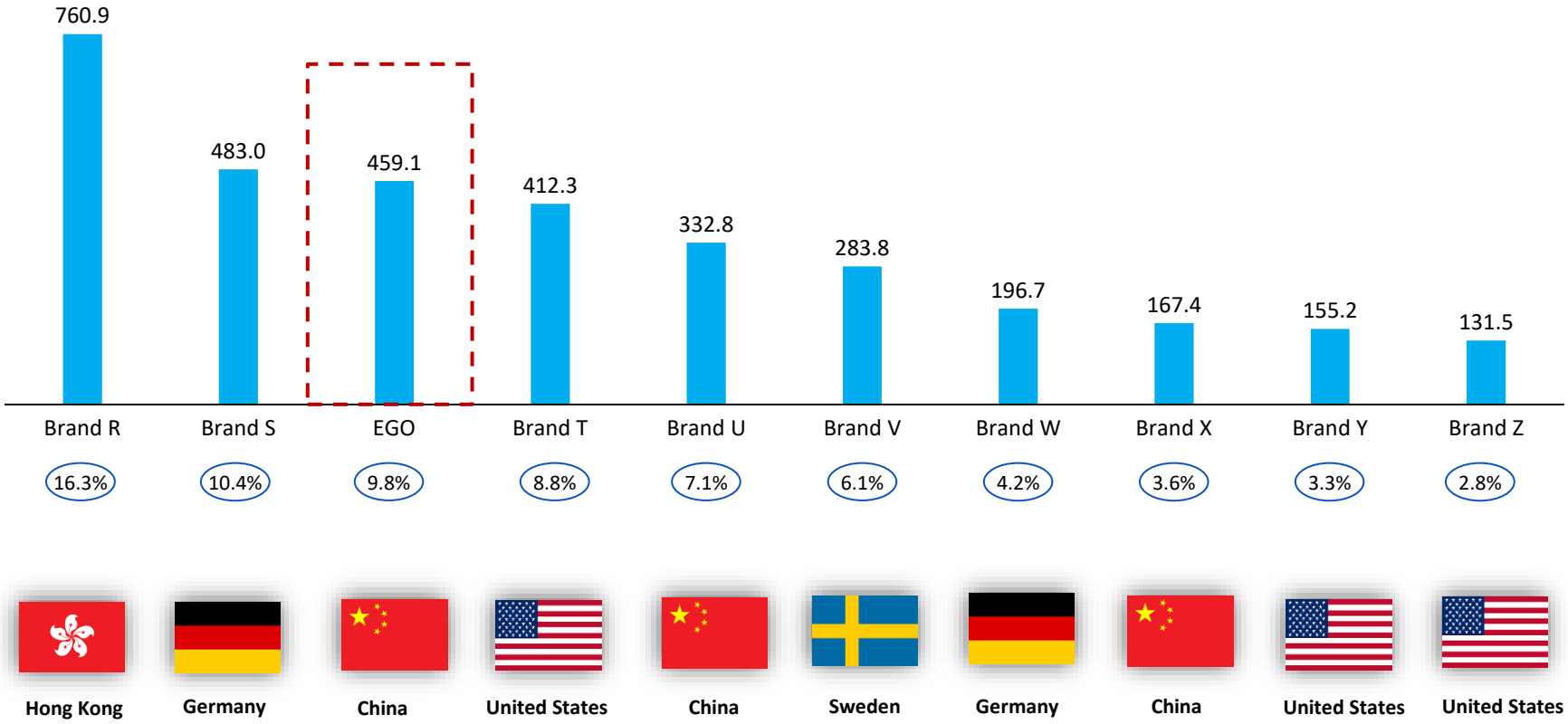
Ranking-13

Ranking of the Leading Electric Outdoor Power Equipment Brands by Revenue (Global), 2020

USD Million

XX% Market Share

CR10: 72.6%



Source: Frost & Sullivan Analysis and Estimates

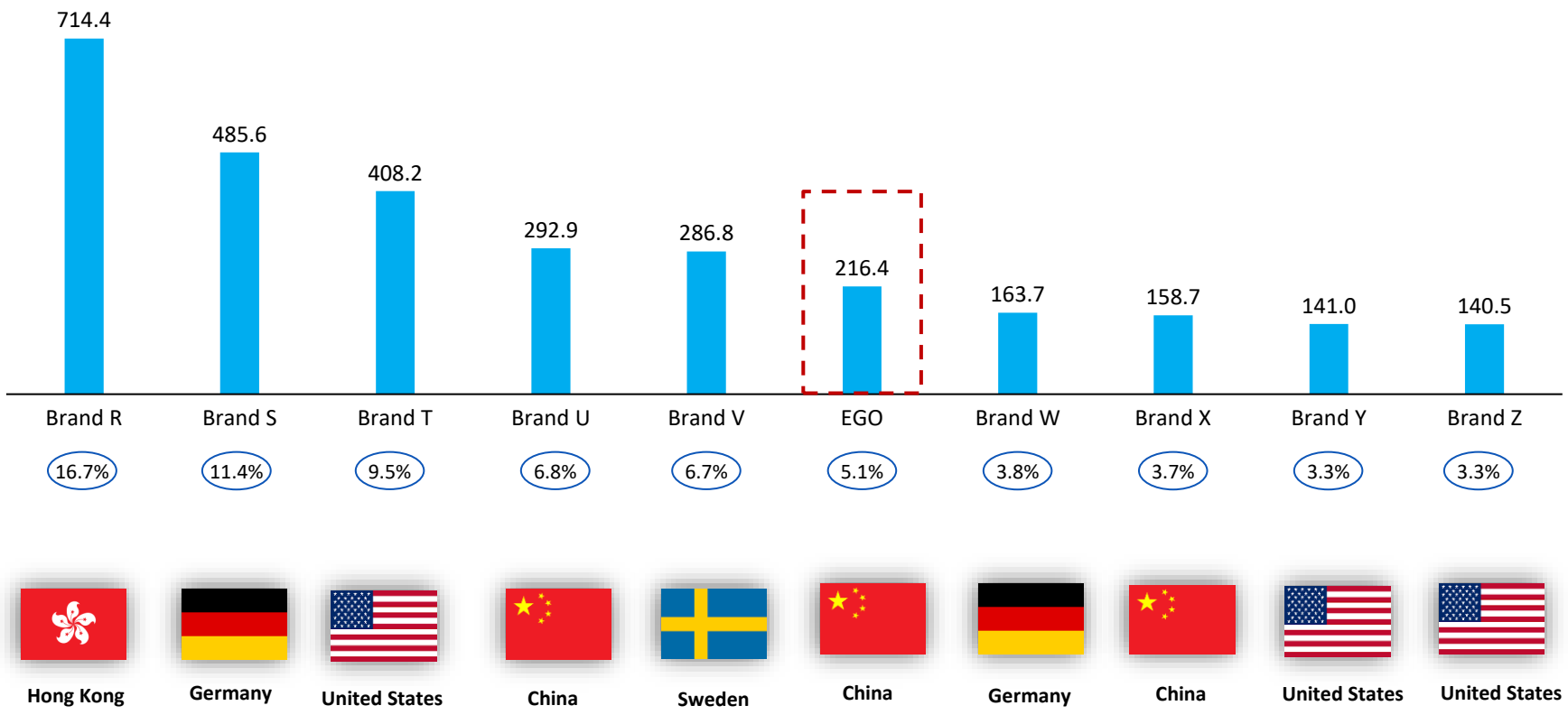
Ranking-14

Ranking of the Leading Electric Outdoor Power Equipment Brands by Revenue (Global), 2019

USD Million

XX% Market Share

CR10: 70.3%



Source: Frost & Sullivan Analysis and Estimates

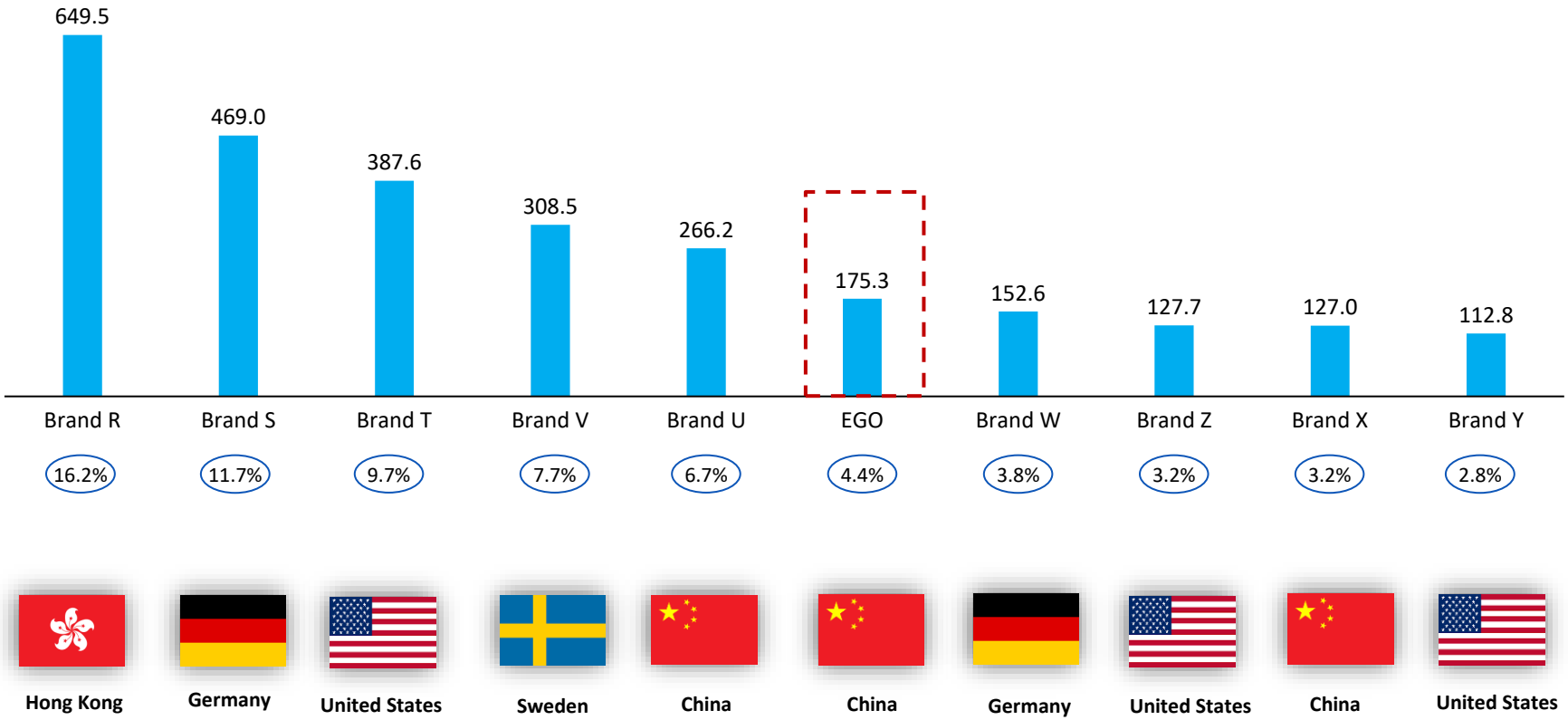
Ranking-15

Ranking of the Leading Electric Outdoor Power Equipment Brands by Revenue (Global), 2018

USD Million

XX% Market Share

CR10: 69.4%



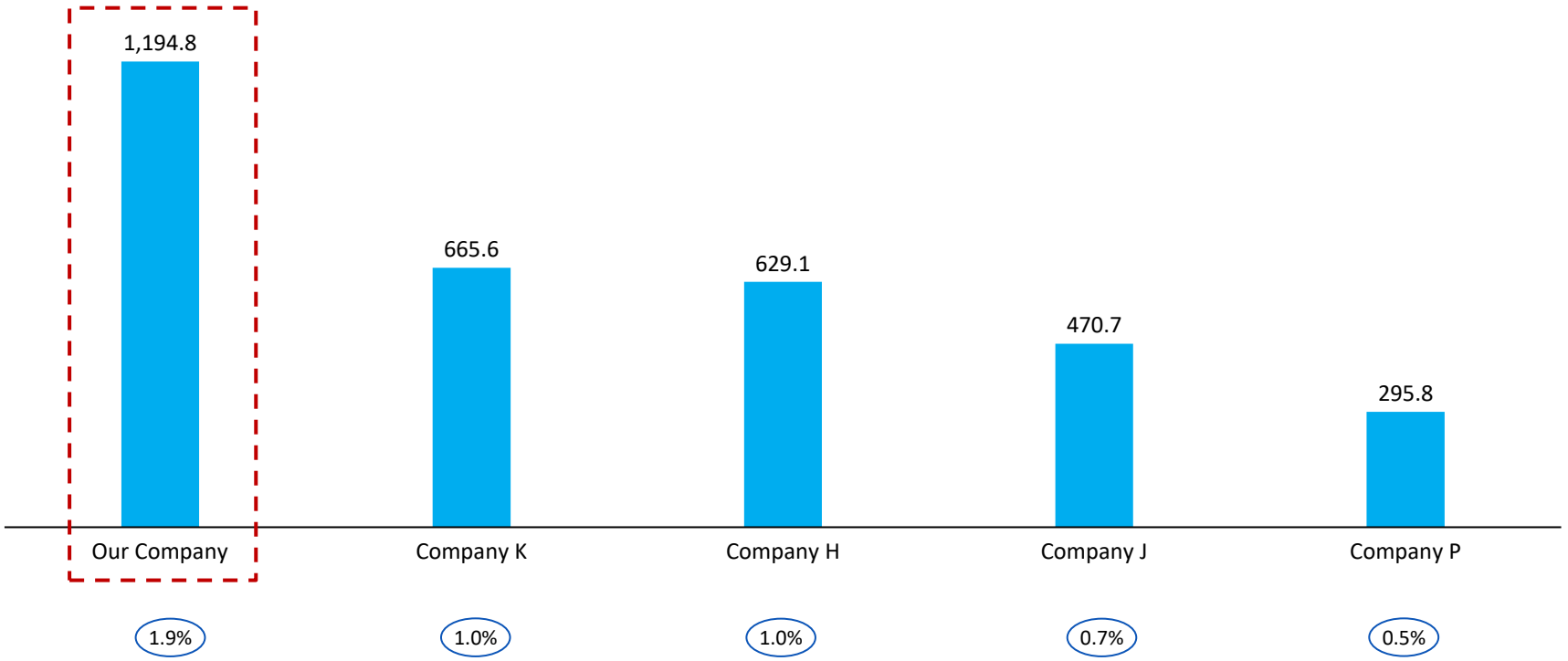
Source: Frost & Sullivan Analysis and Estimates

Ranking-16

Ranking of the Leading China-based Power Tool and Outdoor Power Equipment Companies by Revenue (Global), 2020

USD Million (XX%) Market Share

CR5: 5.1%



Note: The revenue refers to the sum of revenue of power tool and outdoor power equipment generated by the companies; the market share refers to the corresponding market share as a percentage in the global power tool and outdoor equipment market in terms of revenue.

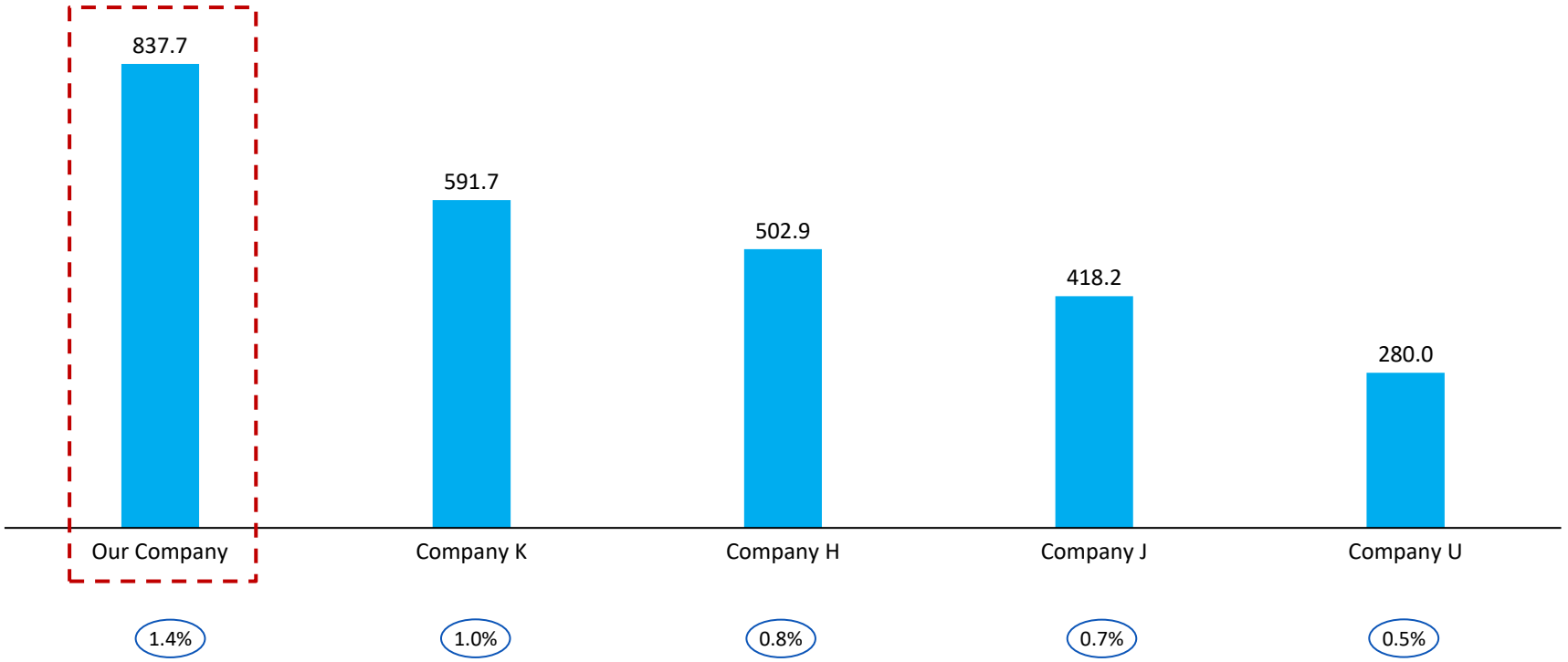
Source: Frost & Sullivan Analysis and Estimates

Ranking-17

Ranking of the Leading China-based Power Tool and Outdoor Power Equipment Companies by Revenue (Global), 2019

USD Million (XX%) Market Share

CR5: 4.3%



Note: The revenue refers to the sum of revenue of power tool and outdoor power equipment generated by the companies; the market share refers to the corresponding market share as a percentage in the global power tool and outdoor equipment market in terms of revenue.

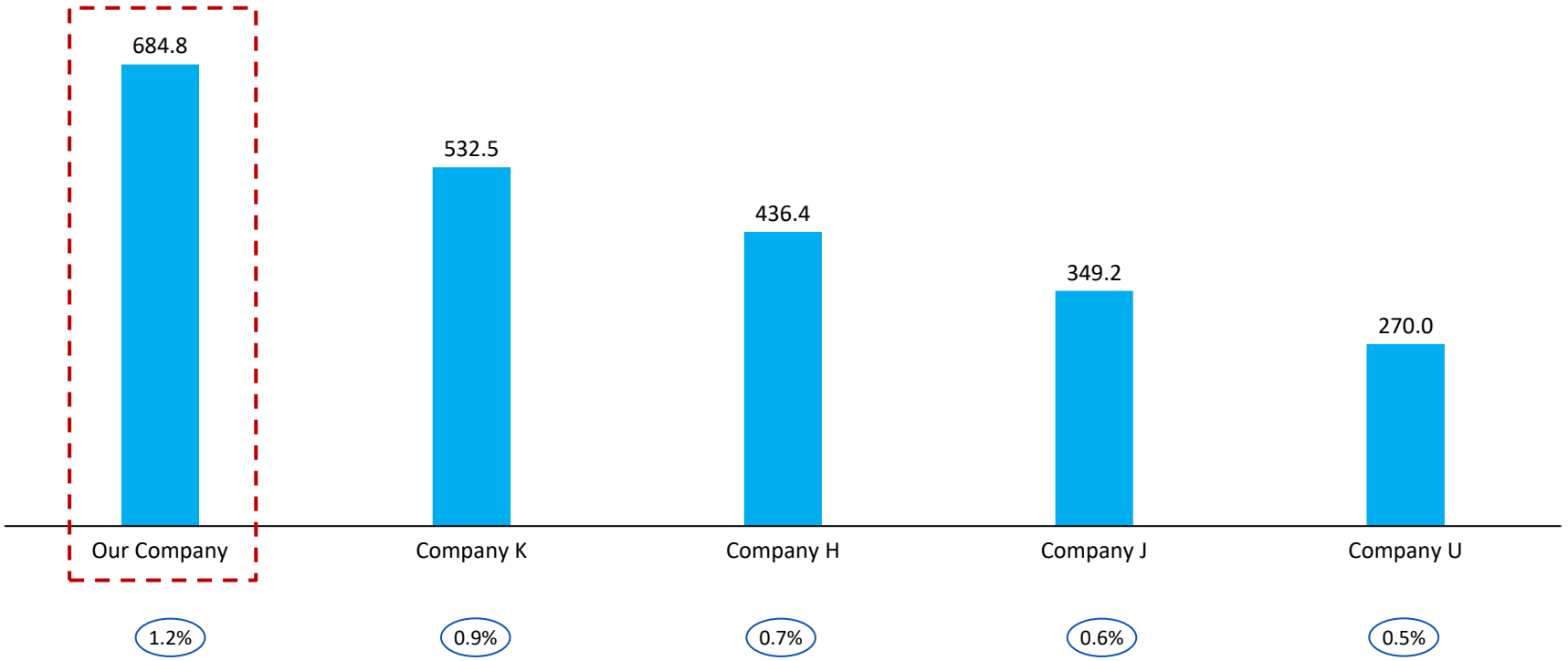
Source: Frost & Sullivan Analysis and Estimates

Ranking-18

Ranking of the Leading China-based Power Tool and Outdoor Power Equipment Companies by Revenue (Global), 2018

USD Million (XX%) Market Share

CR5: 3.9%

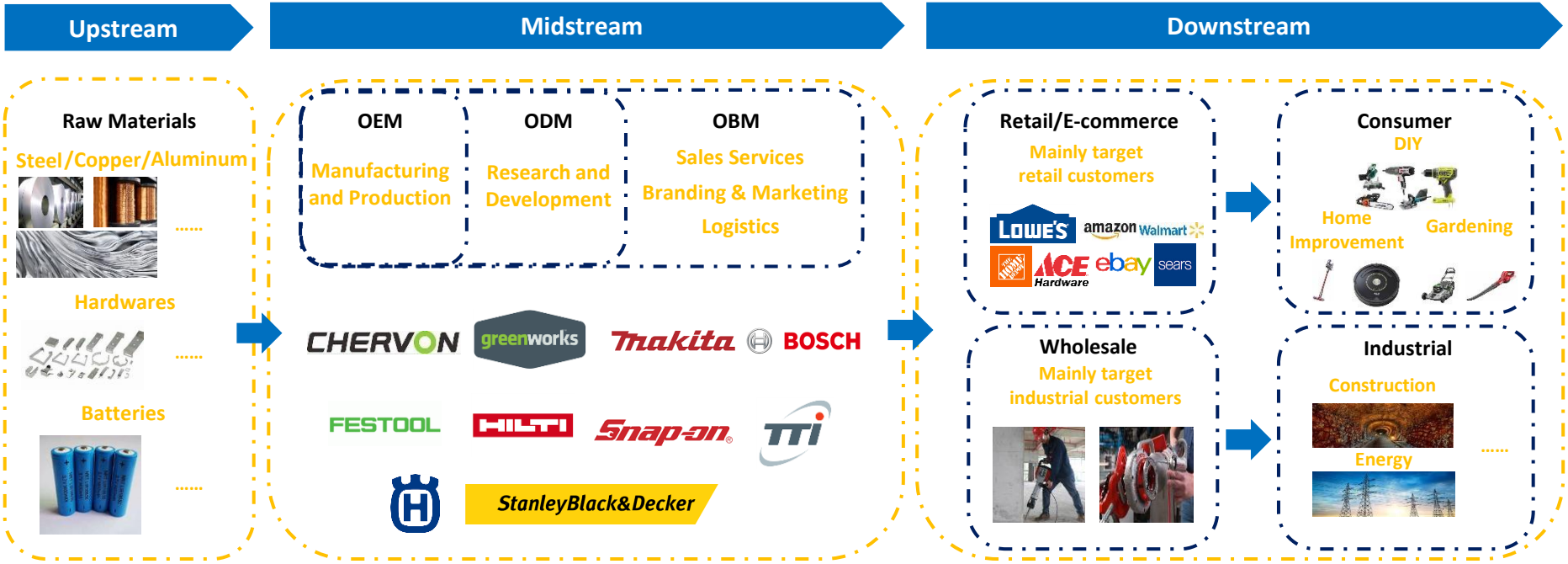


Note: The revenue refers to the sum of revenue of power tool and outdoor power equipment generated by the companies; the market share refers to the corresponding market share as a percentage in the global power tool and outdoor equipment market in terms of revenue.

Source: Frost & Sullivan Analysis and Estimates

Business/Distribution Models, Industry Value Chain and Go-to-market Analysis

- In the midstream of the power tool and outdoor power equipment industries, there are three main types of manufacturing:
- **OEM (Original Equipment Manufacturing)** is defined as manufacturing products of other brands according to their specific needs.
- **ODM (Original Design Manufacturing)** refers to not only manufacturing the products of other brands but also getting involved in the research and design of the products.
- **OBM (Original Brand & Manufacturing)** means that a company will cover the process of manufacturing, design, logistics and sales of their own branded product.
- The major players in the power tool market is the **OBM (Original Brand & Manufacturing)** who covers the whole process of manufacturing different products. OBM will sometimes outsource part of their business like design and manufacturing of the product to **ODM (Original Design Manufacturing)** so that they can focus on the branding and marketing of the product which comprise the majority of the profit. They will also outsource only the manufacturing part to their trusted **OEM (Original Equipment Manufacturing)**.
- China, the major global manufacturing base of power tools and outdoor power equipment products, has a lot of Original Equipment Manufacturing companies who manufacture product of high quality at a lower cost for big name brands. In recent years, there is an emerging trend that the OEMs in China are acquiring global brands to develop their own proprietary brands and position themselves higher in the value chain.



Source: Frost & Sullivan Analysis and Estimates

Key Market Challenges Analysis

Product Competition

Companies in the global power tool and OPE markets face product competition in terms of technological advancement and pricing. Relevant technologies are constantly evolving in the global power tool and OPE markets, such as from corded to cordless and from gasoline to electric. Faced with increasing end-user expectations for product features such as multi-tasking functions and upgraded IoT applications, companies must devote resources in a timely and cost-efficient manner to support the development of new products that can provide greater performance, versatility and convenience. In addition, as price competition is prevalent in the markets, companies may lose customers, end-users and market shares if they are unable to offer quality products with prices that are lower than competitors' products of similar performance.

Relationship with major retailers and distributors

Competition is intense among companies in establishing effective relationships with major retailers and distributors, which account for a substantial portion of the sales in the global power tool and OPE markets. If the relationships between a company and its major retailers or distributors deteriorate, the company's financial performance may be negatively affected..

Price fluctuations and potential shortages of raw materials

Fluctuations in the price of raw materials may have a negative impact on the costs of companies in the power tool and OPE markets. In addition, the raw materials that companies need for manufacturing of products may be in short supply. For example, the supply for lithium-ion batteries may be limited due to the increased use of such batteries in electric vehicles.

Uncertainty of global operations

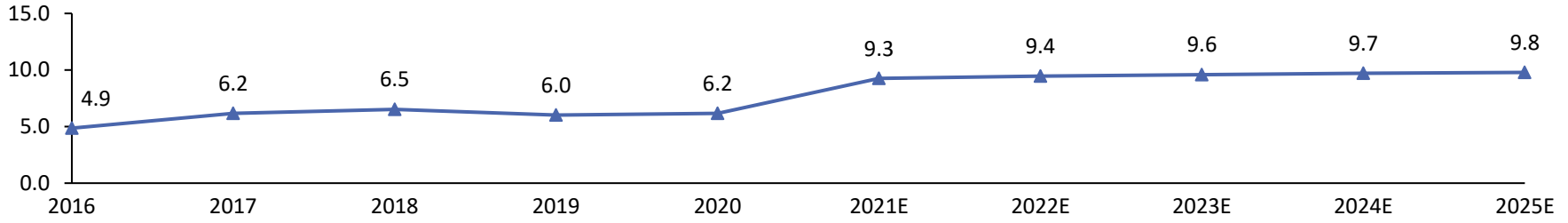
Many companies in the power tool and OPE markets are faced with challenges arising from their global business operations, such as evolving regulations, economic recessions, foreign currency fluctuations, among other aspects. For example, in respect of international trade, the U.S.-China trade tensions have contributed to increased costs of goods, and the COVID-19 pandemic has caused interruptions to manufacturing and exports and imports of many businesses, as well as fluctuations of freight and shipping costs.

Source: Frost & Sullivan Analysis and Estimates

Raw Materials Analysis [1/2]

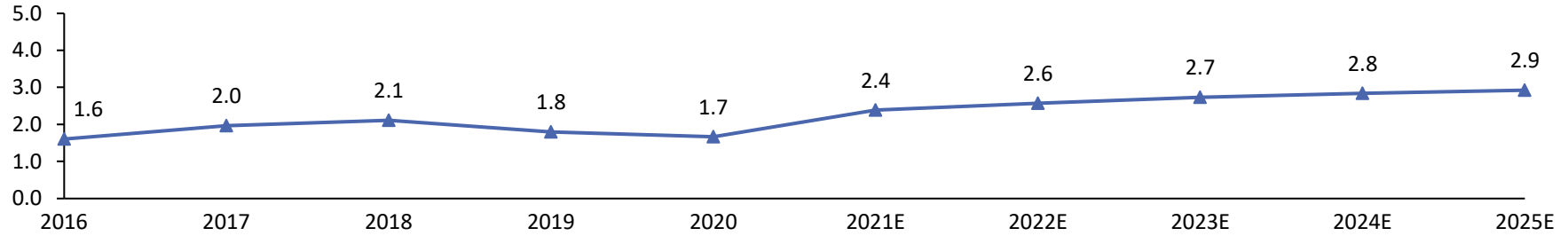
LME: Copper

Thousand USD/Ton, 2016-2025E



LME: Aluminum

Thousand USD/Ton, 2016-2025E



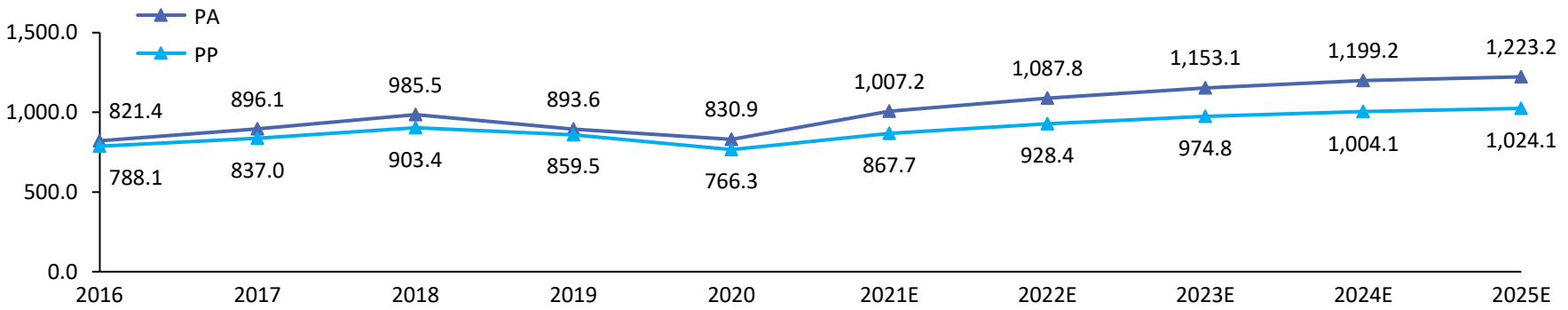
- Attributable to the global economy expansion, the price of copper showed an upward trend from 2016 to 2018, and followed by a decline in 2019 due to the trade war between the United States and China. In 2020, the fluctuations of copper was comparatively flat and was expected to slightly go up in that the world economy will recover overtime. With the recovery of the global economy in 2021, we expect a surge in the price of copper. In addition to the deficit in the inventory, the relatively unchanged supply of copper in contrast to the strong growth in respect of demand recently driven by traditional manufacturing, construction, and industrial sectors' rebound and as well as green initiatives indicates a price hike would be unavoidable.
- Aluminum price increased from 2016 to 2018 when China was experiencing a massive expansion in real estate and automotive industry. However, due to the overestimation of the market demand, the supply of aluminum exceeded the aluminum demand and caused the price of aluminum to fall. The reason why the downward trend went on for the following two years is mainly due to the excessive inventory of aluminum yet decreasing demand. Looking forward, the year of 2021 is expected to see a jump in the price of aluminum due to the increase in China aluminum import, difficulty in global logistics and recovery of the production of global manufacturing goods.

Source: London Metal Exchange; Frost & Sullivan Analysis and Estimates

Raw Materials Analysis [2/2]

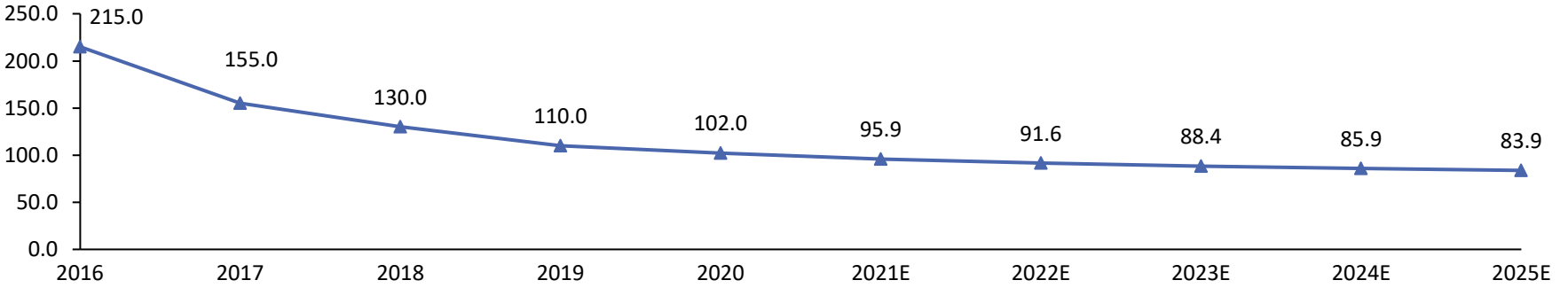
Price index of Nylon plastic (PA) and Polypropylene (PP)

2010/1/4=1000, 2016-2025E



Volume-weighted Average Cell Price

Real 2020 $/kWh, 2016-2025E



- Nylon plastic (PA) and Polypropylene (PP) are two of the main plastic particle raw materials of the plastic component that power tools use. The price index of nylon plastic (PA) and polypropylene (PP) were relatively flat from 2016 to 2020 and is expected to increase with the recovery of the global economy.
- In terms of the average price of the lithium-ion battery cell, an declining trend was observed between 2016 and 2020. Despite the recent fluctuations in the price of lithium-ion battery cell, the price is anticipated to decline in the long run considering the global environmental policies and rapidly evolving technologies.

Source: BloombergNEF; Wind; Frost & Sullivan Analysis and Estimates

Market Drivers Analysis

	Major Drivers	Impact (1-2 years)	Impact (3-5 years)
1	Lithium-ion battery to be the future trend	High	High
2	The emergence of advanced/smart technologies	High	High
3	The rise of online sales channel and social media marketing strategy	High	Medium
4	Consumption upgrade and strengthened housing demand	High	Medium
5	The impact of DIY behavior promotes demand	High	Medium

Major Drivers	Analysis
Lithium-ion battery to be the future trend	Over the past couple of decades, the global power tool and outdoor power equipment market has been empowered by advanced technology, switching from traditional corded mechanical or gasoline-powered tools to cordless tools that are environmental friendly and of great convenience. With the rapid improvement of the capacity, safety and fast penetration of batteries, lithium-ion batteries, in particular, which have the characteristics of high energy density and storage stability, are replacing traditional batteries of other materials. In addition, with the emergence of battery platforms, greater convenience is achieved through increasing compatibility and cost reduction which in turn gain loyalty among customers.
The emergence of advanced/smart technologies	With the rapid development of smart technology, the application of 5G and IoT has penetrated across different segments. As for the power tool market, smart tools from established brands can collect data and upload it to cloud storage so that users can access their project data anywhere at any time which greatly increases flexibility and convenience. In the future, smart household appliances can be all accessed through one device. With the growing trend of smart technology, people will gradually be attracted to them and eventually cultivate the habit of using tech-enabled devices.
The rise of online sales channel and social media marketing strategy	Given the everchanging environment, companies try to follow the latest trend and technology in order to retain customers. Meanwhile, the pandemic further accelerates the development of online channel. On the other hand, interaction with customers has become a growing trend to retain the customers. As the focus of the companies shifting on to customers, frequent customer interaction can enhance brand awareness, helps understand customer behaviors and introduce new products that meet customers' needs quickly and accurately. Thus, social media, as the channel that has the most internet user exposure will continue to grow and to be the major marketing channel in the near future.
Consumption upgrade and strengthened housing demand	In the world of everchanging technologies, we can see a growing trend in annual consumption expenditure. The smart power tools empowered by 5G and IoT technology would be products of cutting-edge technologies which may benefit from the consumption upgrade environment. On the other hand, the record-low rates environment drastically stirred up the housing market to an overheated level. The strengthened housing demand creates lots of construction works which resulted in the increase of industrial power tool products. Due to the inertia of housing market, we expect the momentum to prevail in next couple of years.
The impact of DIY behavior promotes demand	In developed countries, people have the habit of doing DIY handicraft at home for improvement purposes. When the pandemic hit, due to the abundant time people had at home, the DIY activities surged greatly. People started to spend more time on house decoration and would also trim their lawn and bushes in the garden. Both power tool and gardening tool demand experienced surge during the pandemic, and such momentum is expected to sustain in the near future due to the behaviors cultivated during the pandemic.

Source: Frost & Sullivan Analysis and Estimates

Future Trends Analysis

Advanced Technologies Continue to Promote Sustainable Development

Tracing the history of the power tool market, corded power tools dominated the whole market until the recent development of cordless technology advancement being put on some of the power tools, such as gas-, air-, cordless tools.

Given that we are stepping into the new digital era, the increasingly developing technologies have helped reshape the power tool industry.

Due to the convenience and safety provided by cordless tools, people are increasingly switching from corded power tools to cordless ones across sectors and geographies.

In terms of the type of technology, the lithium-ion battery system ranks first among the available technologies which attribute to its performance, battery capacity, and safety. Its value-added feature can enhance the product experience of users across different scenarios from multiple perspectives.

In addition, with the development of modern technology, multi-functional power tool has come to the world which, for example, can combine saw, scraper, sander, and grinder in one handy tool.

Furthermore, with the empowerment of IoT technology, it enables smart power tools to collect data and save it on the cloud so that users can easily access and focus on the project anywhere at any time.

Omni-channel Distribution Strategy

The omni-channel distribution strategy provides a one-touch interface through which customers can decide the way they purchase the products, either through online channels or at physical stores, and whether to receive the products at home or pick it up at local stores. The all-in-one distribution system offers unprecedented convenience for customers and can greatly impact consumer behaviors in every possible way.

More and more companies are utilizing omni-channel distribution for their future business planning. For instance, one company has its product on online channels and through other distributors that can better reach their customers. Another company distributes their product to home improvement distributors, mass merchants and home centers. The e-commerce sales contribute to half of one of the leading players' total power tools sales. The increasingly expanding distribution channel scale unveils the big brands' future business planning is to reach their customers in every possible way accurately and quickly. Since the pandemic outbreak, people's behavior has changed greatly and in order to rapidly adapt to this huge behavioral transformation, we can expect more companies to upgrade to omni-channel distribution and considerably improve customer experience.

Integrated Value Chain Approach

Showing up as a silver lining, the value chain in the power tools market will become more integrated. Traditional companies would have separated department for research and development, manufacturing, distribution, sales team, marketing department, etc. which turns out to be inefficient and costly. Nowadays, with the continuously evolving environment, companies are turning to be more customer-oriented and integrating the whole business process so that they may respond to the market quicker and take advantage of the time. That is to say, companies would like to understand customer behaviors and then turn to product development, manufacturing with transparent IoT technology and deliver the products through omni-channel distribution method. And thus the whole value chain would be more integrated and well-organized than it could ever be which can rapidly accelerate the business process, help companies target customers more accurately and retain customers overtime.

Companies will essentially focus on customer behavior and enhance customer retention to the greatest extent. Thus, integrated value chain approach would be the most efficient, prevalent, result-oriented way to stay competitive in the power tool market.

Source: Frost & Sullivan Analysis and Estimates

Covid-19 Impact Analysis

Sustained Surge in Demand for Tools and Building Materials for Home Improvement due to Limited Option for Travel or Leisure Activities under Quarantine Policy

- Since the start of the pandemic, people's behavior has changed greatly. As a result of the initial stay-at-home policy to stop the spread of the COVID-19 virus, people have limited options to travel or leisure activities. When people have plenty of spare time at home and, meanwhile, the labor cost in that country is high, they would spend more time decorating or improving the household interior and surroundings. In the United States, for example, people there have the habit of home improvement and will do some DIY works during the casual time to make the house look better for themselves. Typically, American people may build some small furniture like stools or trim the lawn and bushes in their backyard. For one thing, they enjoy doing the handwork and can feel fulfilling when finishing the handicraft. Additionally speaking, the adornment in the developed country are rather expensive and can not cater to everyone's special needs. To decorate the house in an inexpensive way that can also meet a person's special needs and, at the same time, having a sense of achievement, DIY activities became the top choice for most Americans. During the pandemic, the sales value of electric power tools rocketed to a record-high level, as the result of the surge in the power tools demands among developed countries.
- Among developing countries, we may witness a slightly different trend. From the macro business perspective, the household consumption of power tools only consists of a rather small portion of the whole market and household consumer are still at a growing stage from the business perspective. On the other hand, industrial customers occupy a significant portion of the market, and the whole market went down due to the shut down of commercial and industrial plant operation. However, over the past several quarters, the industrial production in China has mostly resumed which offers strong support from the supply side.

The Record Low Mortgage Rates Encouraged Consumers to Invest in Housing

- The year of 2020 has witnessed robust growth in the real estate sector. Taking the United States as an example, since the start of the pandemic, the U.S. government released multiple stimulus packages and implemented loose monetary policies by means of quantitative easing and lower the interest range down from 0 to 25bps, trying to pull back the economy back on track. Given the record-low rates environment, the housing market can't be more overheated. Both residential buyers and institutional investors are taking full advantage of the low mortgage rate and the turnover in the housing market are huge. Whether it's for investing or changing a place to live, the low rates environment provides the best financial tools to stir up the housing market. We can expect the housing market to slowly calm down but the housing activity level may still stay high due to the inertia in the real estate market.

Online Channel Has Expanded Incredibly During the Pandemic

- People's way of living has changed completely since the prevalence of COVID-19. Due to the closedown of many public places, people started to increase their online spending greatly and have gradually formed the habit of shopping online. This transition would profoundly change customer behavior and we can expect a growing e-commerce penetration rate going forward.

Source: Frost & Sullivan Analysis and Estimates

Key Success Factors

☐ Owning Premium Brands

Given that the annual consumption expenditure in most countries shows an increasing growing trend, the world is experiencing an consumption upgrade. We can see more and more players are entering and establishing their own premium brands in the power tool market, and the competition has become increasingly intensified overtime. Power tool consumers would like to purchase tools that is of good quality, better performance and embedded with cutting-edge technology. As the customers have more specific needs and are purchasing products more frequently, they would eventually be aware of the brand value and stick to certain brands when considering what to buy. In order to compete and gain market share, many players in the market has already acquired multiple premium brands to enhance their market presence.

☐ Technology Capability

The proliferation of the IoT and 5G technology has greatly empowered multiple industries including power tool market. Nowadays, technology has already become a crucial part in developing the power tools. With the latest technology, power tools can now collect data and store it on the cloud drive so that users can access the data of their projects anywhere at any time which greatly enhances convenience and productivity. Moreover, technology has also improved working capacity and safety of the users. For example, cordless power tools are of better portability and workers are able to work at narrow spaces or higher construction site where corded tools have limited access to power. From safety perspective, workers no longer need to worry about being tripped by the power tools with the advancement of cordless ones. In addition, with the development of lithium-ion batteries, the cordless power tools can have better performance, producing little noise and harmful dust. Most of the players are investing huge amount of capital in research and development in order to increase their technology capability, and technology no doubt has become the caterpillar to win the competition.

☐ Self-owned Manufacturing Capability

Several decades ago, many big players in the power tool marketing outsourced most of their manufacturing either to lower-labor cost countries or to other local OEMs to cut cost. However, in an everchanging world, things have already gone completely different now. Since the pandemic, international trade risk has popped up to every global operating manufacturer. Moreover, there hasn't been a time when the power tool industry value chain is more integrated. With the empowerment of IoT, companies now can connect product design, production, logistics, distribution, customer closer than ever. In that way, companies can respond to the change of customer behavior quicker and are able to reduce unnecessary cost.

Source: Frost & Sullivan Analysis and Estimates

Entry Barriers Analysis

Brand Awareness

The power tools market is, to a certain degree, brand-oriented. When people are considering purchasing a power tool, they tend to stick to a certain brand and the chance of switching a brand is rather small in that the average useful life span of a power tool is comparatively longer than many retail products and its average price higher as well. In order to attract customers, one of the major brands has recently started to acquire a local brand called craftsman and all tried to move plants locally to enhance their brand awareness.

Distribution Channel

Many companies in the power tool market are distributing their products in multiple distribution channels. This trend is not only attributable to the varied customer group, but also to the miscellaneous product lines. Since different products are designed to meet various needs of different customers and thus the most efficient way to reach them is through multiple distribution channels. It takes time and effort to build distribution channels, and furthermore, the established relationship between big brands and distribution channels would place another obstacle for new joiners who want to enter the market.

Technology and R&D Capability

As the new digital decade unfolds, we witness digital transformation more or less in almost every corner of the developing world. Technology, being a crucial pillar of the power tool business, is growing important than ever for companies who want to stay in the market in the long run. With the prevalence and development of 5G and IoT technology, power tools now can collect data and save it to the cloud so that people can access their project anywhere at any time. Technology has already become an important arena for companies to establish themselves and to win the market share, since more and more companies spending incredible amount of capital in developing advanced technologies to stay competitive.

Industry Expertise

The Knowledge of the industry is another essential factor for companies to thrive in the power tool market. In terms of the whole business system, different parties in the power tool industry are rather closely connected and integrated. Companies would merchandise new products to customers through different distribution channels and get to know the whole market and customer-specific needs, to design new products accordingly. With the acceleration of the product development cycle, industry expertise is indispensable for companies to enter the market.

Source: Frost & Sullivan Analysis and Estimates

Additional Information (1/7)

1. Chervon is the No. 1 China-based global provider of electric power tools and outdoor power equipment ("OPE") and has achieved global market leadership with rapid growth. In 2020, Chervon ranked the 13th place and accounted for approximately 1.9% of global power tool and outdoor power equipment market with revenue of approximately USD1.2 billion.
2. Chervon has established a preeminent position as an industry leader in the lithiumized, intelligent and digital era.
3. Chervon is the largest China-based provider of electric power tools and OPE by global revenue for three consecutive years from 2018 to 2020.
4. End users have shown increasing preference for lithium-ion battery power tools and OPE, which provide for benefits such as convenience, efficiency and environmental friendliness, while delivering power and performance that can rival traditional products.
5. From 2020 to 2025, the global lithium-ion battery power tool market is projected to grow at a CAGR of 9.9% and the global lithium-ion battery OPE market is projected to grow at a CAGR of 9.0%.
6. Chervon pioneered this industry segment by being one of the first companies to commercialize a lithium-ion battery power tool in 2006 and a high-voltage OPE tool in 2014.
7. In particular, Chervon's EGO brand has gained strong recognition in the global OPE market since its establishment.
8. Chervon has established an industry-leading, integrated system of research and development, sales and distribution and manufacturing capabilities
9. Pioneering in industry transformation in the lithiumized, intelligent and digital era, industry leadership of Chervon enables it to reach a broad end-user base to accumulate industry knowledge and end-user insights.
10. Chervon is the global leader in electric power tool and outdoor power equipment market, and is No.1 China-based company, which is powered by cutting-edge technology, design and production capabilities.
11. Chervon's testing center is one of the largest within the power tool and OPE industry and follows the high industry standards in the world, and it has achieved accreditations from both Chinese and global standard-setters.
12. Chervon maintains close and strategic relationships with leading home centers and mass market retailers, and also partner with reputable distributors and local retailers to diversify our sales channels and promote brand recognition.
13. Over the past 20 years, Chervon has focused on building competitive advantages by advancing our manufacturing technologies and production capabilities with craftsmanship and perfectionism.
14. Chervon' revenue increased at a CAGR of 31.9% from US$690.7 million in 2018 to US$1,200.9 million in 2020, which was significantly higher than the 4.9% for the global power tool and OPE industry over the same period, according to the Frost & Sullivan Report.
15. Chervon is one of the first businesses to apply lithium-ion battery technology to power tools and to develop an industry-leading, high-voltage OPE product.

Source: Frost & Sullivan Analysis and Estimates

Additional Information (2/7)

1. Chervon's ability to lead and innovate has enabled it to seize the growth opportunities afforded by technological advancement and continuously increase our market share in the power tool and OPE market.
2. Chervon has expanded its market shares in rapidly expanding segments of the global power tools and OPE markets.
3. Chervon's share of the global electric power tool market increased from 1.8% in 2018 to 2.3% in 2020, and our share of the global lithium-ion battery OPE market grew from 5.0% in 2018 to 11.4% in 2020.
4. From 2020 to 2025, the global lithium-ion battery power tool market is projected to grow at a CAGR of 9.9%, and the global lithium-ion battery OPE market is projected to grow at a CAGR of 9.0%
5. End-users have shown increasing preference for lithium-ion battery power tools, which generally provide for convenience and long running time in different work environments. Similarly, end users have demonstrated growing demands for lithium-ion battery OPE products, which are typically less noisy and more convenient and environmental friendly.
6. Lithium-ion battery OPE products can also offer greater cost efficiency because battery platforms can be made compatible across different product types and they do not require regular maintenance expected for traditional gasoline-powered equipment.
7. Advancement in lithium-ion battery technologies also enables lithiumized tools and OPE to provide power, performance and running time that rival traditional products.
8. Besides lithium-ion battery platforms, Chervon also devotes significant resources to research and development of IoT, sensor and artificial intelligence technologies to improve user experience and position ourselves higher in the industry value chain.
9. Chervon attained an industry-leading position through its five well-recognized, differentiated brands that comprehensively cover industrial/professional and consumer power tools and residential and commercial OPE products, as well as most categories of power tools and OPE products.
10. Chervon's proprietary brands have gained strong recognition in their respective markets and contributed significantly to its revenue growth.
11. The EGO brand has gained strong recognition since its establishment in 2013, which enabled Chervon to establish a preeminent position in the global electric OPE market.
12. EGO is one of the world's first OPE brands originated from China. EGO has delivered successful sales results in key OPE markets, particularly North America.
13. With its German origin in 1922, FLEX brand has achieved recognition primarily in the professional tool market and is supported by superior knowledge and experience in product development and manufacturing.
14. Chervon experiences significant competition for highly skilled personnel, including management, engineers, designers and product managers, as our growth depends in part on our ability to retain our existing personnel and recruit highly skilled employees.
15. Chervon's share of the electric power tool markets in North America and Europe increased from 2.1% and 2.1% in 2018 to 2.7% and 2.5% in 2020, respectively. Chervon's share of the electric OPE markets in North America and Europe increased from 12.2% and 1.5% in 2018 and 30.2% and 1.7% in 2020, respectively.

Source: Frost & Sullivan Analysis and Estimates

Additional Information (3/7)

1. Chervon's products are prominently featured and well recognized across sales channels.
2. Lowe's was one of the largest retailers of construction tools and OPE products by revenue in North America in 2020.
3. Kingfisher and Leroy Merlin are leading home centers in Europe, as well as Walmart, a leading mass-market retailer in the United States
4. The 56V Arc-LithiumTM battery platform combines energy, capacity and high voltage to enhance the battery's power output, run time and potential to transfer energy, respectively. Meanwhile, unlike large, heavy gasoline-powered equipment, the fold-flat design of our EGO products makes it easier to store, clean and transport the equipment.
5. EGO products also feature ergonomic design and high-performance materials to enhance end user experience.
6. Chervon further increased its competitiveness in the OPE market by successfully launching SKIL-branded lawn and gardening tools in 2020 with focus on the North America market.
7. Chervon is at the forefront of seeking breakthroughs in key technologies that promote the performance and safety of power tools and equipment.
8. The performance of power tools and OPE depends on fundamental technologies involving battery platforms, motors and electric controls.
9. Battery platforms provide energy and power that are converted by motors into driving forces for a tool or equipment, with electric control systems monitoring and directing the operation of the tool or equipment to optimize end user experience. The battery platform is protected against water and elements by sealed and shock-resistant materials, which support a high level of performance and durability.
10. Motors translate the electricity supplied by battery platforms into rotating motions that drive a power tool or equipment.
11. Functioning like a nerve center, an electric control system (i) gathers and responds to information through input devices such as sensors and (ii) controls the tool or equipment by using electrical energy in the form of an output action.
12. Traditional motors with physical sensors that are prone to malfunctioning due to metal dust exposure.
13. Chervon is one of the largest power tool manufacturers in China.
14. Chervon's products are featured prominently in the sales channels that are top of mind for local consumers.
15. Chervon's distribution model is consistent with market practice in the global power tool and OPE products industry.
16. E-commerce platforms have become an important and fast-growing sales channel due to its increasing penetration of the power tool and equipment markets.
17. The power tools and OPE industries are highly competitive and we face competition in all aspects of our business.
18. Chervon generally competes with other global and domestic leaders in the power tool and OPE industries. The principal competitive factors in the industry, including our reputation for product quality, emphasis on product innovation and development, the breadth of our product lines, our speed to market, our well-known brands and our strong customer relationships and after-sales services.

Source: Frost & Sullivan Analysis and Estimates

Additional Information (4/7)

1. Chervon's robust brand portfolio, which resonates with our end users, also helps solidify its preeminent market position.
2. Meanwhile, Chervon leverages its integrated supply chain management system to source certain raw materials, parts and components from industry-leading suppliers in order to maintain high quality standards.
3. Chervon has brought to market its industry-leading riding mowers in 2021, which are equipped with brushless motor technology and powered by removable platform-compatible EGO lithium-ion batteries, which is one of the first of its kind to apply across riding mowers, walk-behind mowers and handheld OPE products.
4. Chervon's riding mower product delivers the power and performance equivalent to a gasoline engine, which has led to the same level of breakthrough disruption to the riding mower category as EGO's initial launch did to the OPE industry.
5. As the inventor of one of the world's first high speed angle grinder with a flexible shaft, FLEX is often used synonymously with angle grinders in the German language.
6. Driven by such collaborations, Chervon's share of the electric power tool markets in North America and Europe increased from 2.1% and 2.1% in 2018 to and 2.7% and 2.5% in 2020, respectively.
7. Chervon has built one of the most advanced manufacturing operations in the global electric power tool and OPE industry.
8. As one of the industry's first 56V battery platforms, EGO's Arc-LithiumTM battery technology enables its OPE products to provide for superior performance and run time.
9. Chervon's walk-behind mower product features intuitive ambidextrous self-propel control, a variable-speed dial, a premium brushless motor and a multi-blade cutting system, which collectively provide for superior power, performance, versatility and long run time.
10. With its patented antistatic technology and featuring one of the world's first middle intake airflow design, EGO blower offers quietness, light-weight and compactness that enables end users to get the job done faster and more comfortably compared to traditional gasoline engine products.
11. Founded in Germany in 1922, FLEX developed one of the world's first high speed angle grinder in 1954, and the name FLEX is often used synonymously with angle grinders in the German language.
12. EGO string trimmer product features (i) the patented POWERLOAD™ Technology, which solves a significant pain point of string trimmers by being one of the world's first string trimmer tool that can automatically wind the trimmer line by a simple push of button and (ii) a carbon-fiber shaft that is stronger than steel but lighter than aluminum and can be telescopic so that users at different height can use the product at comfortable positions.

Source: Frost & Sullivan Analysis and Estimates

Additional Information (5/7)

1. With its unique inline structure, FLEX 24V brushless circular saw can provide better cutting experience and more cutting depths compared to traditional circular saws.
2. Equipped with its patented PWRCoreTM battery technology and PWRJumpTM charging capability, Chervon's SKIL 12V brushless drill drivers provide superior performance, power, compactness and long run time.
3. Offering durable and affordable power tools with superior performance, X-TRON is well recognized in its market.
4. The power tools and OPE industries are relatively concentrated and highly competitive, and we face competition in all aspects of our business.
5. Chervon rolled out innovative products equipped with new technologies to optimize its product lines under the SKIL brand, which has become highly competitive in both power tool and OPE markets.
6. Chervon is at the forefront of seeking breakthroughs in key technologies that promote the performance, reliability, durability and user experience of power tools and OPE products.
7. After years of research and development, Chervon commercialized one of the first high-voltage OPE products under our EGO brand.
8. Unlike traditional gasoline engines products that generate noises and pollutions, EGO OPE products are designed to help significantly reduce carbon emissions while enhancing user experience.
9. The sale rebate practice to distribution is common in the industry.
10. Chervon's product return policy is in line with the general market practice in the industry.
11. Chervon's distribution model is consistent with market practice in the global power tool and OPE industry.
12. Chervon faces active global competition and if we do not compete effectively, our business may suffer.
13. Chervon faces active competition and resulting pricing pressures. Chervon's products compete on the basis of, among other things, its reputation for product quality, emphasis on product innovation and development, the breadth of its product lines, its speed to market, its well-known brands and its strong customer relationships and after-sales services. Chervon competes with both larger and smaller companies that offer the same or similar products and services or that produce different products appropriate for the same uses.
14. The rapid technological changes that characterize the power tools and OPE industry require that Chervon must quickly implement new processes and components with respect to many of its products.
15. Competition for such qualified personnel is intense. Chervon also faces intense competition for its engineering, product development and industrial design talents in the United States, Germany, the United Kingdom and the Netherlands. Chervon additionally faces competition for such personnel from competitors in the industry.

Source: Frost & Sullivan Analysis and Estimates

Additional Information (6/7)

1. With its unique inline structure, FLEX 24V brushless circular saw can provide better cutting experience and more cutting depths compared to traditional circular saws.
2. Moreover, as the regulations and policies governing and regulating the power tool and garden tool products vary across different countries and regions, Chervon's distributors may not be able to comply with them in a timely manner, or at all.
3. Founded in 1924, SKIL is a well-recognized and powerful brand in the power tool industry.
4. SKIL products are equipped with cutting-edge technologies that resonate with both professional builders and home improvement enthusiasts. With its full assortment of products with innovative features, SKIL has gained popularity and trust in North America and European markets.
5. X-TRON enjoys widespread recognition in its target market.
6. DEVON-branded products are widely used in machinery manufacturing, furniture manufacturing, stone material, shipbuilding, casting, steel structure, construction, decoration, automobile maintenance and other professional fields.
7. DEVON has achieved a leading position among global brands in the competitive and fast-growing China market, and features six major power tool product lines that are widely used in fields such as manufacturing, automobile maintenance and decoration.
8. EGO is a leader in cutting-edge technology and design in the OPE industry and pioneered one of the first cordless OPE products that rival the power and performance of traditional gasoline engines without the noise, fuss, or fumes. Built in-house from the ground up since 2014, EGO has rapidly grown to become the premier brand it is today.
9. There will be sufficient market demand to support Chervon's expansion plan based on several reasons, including (i) the global electric power tool market and global cordless OPE market by revenue to increase by 5.9%, 9.0% from 2020 to 2025, respectively; (ii) during the Track Record Period, Chervon's revenue for electric power tools grew at a CAGR of 15.6% and our revenue for cordless OPE products grew at a CAGR of 64.6% from 2018 to 2020, each of which was the highest among the top 10 players in the respective market; and (iii) the COVID-19 pandemic has not had a material adverse effect on the demand from our customers and end users.
10. Chervon's power tool products for professional and industrial end users are characterized by strong performance, high-end technology, engineering precision and long running time.
11. A brushless motor production line which is equipped with industry-leading technologies such as robotic assembly, visual and audio-visual recognition and motor performance testing.
12. The battery platform also provides [one of the first] high-voltage battery system that uses a third parallel row of cells – the innovative "3P" design – which evenly distributes power across the rows, so that our battery can handle challenging conditions and provide enhanced performance.

Source: Frost & Sullivan Analysis and Estimates

Additional Information (7/7)

1. Outdoor power equipment products are mainly used for lawn and tree trimming purposes. The end-users of outdoor power equipment usually purchase the equipment before lawns and trees flourish and after the trees begin to shed their leaves, thus the market demand for mower, chainsaws, trimmers/edgers shows booming trend especially in spring and fall seasons. On the other hand, the power tools, especially the products which are used by industrial/professional end-users in construction works and motor vehicle aftermarkets demonstrating relatively less seasonality. For the consumer-level power tools, the increasing market demand could be observed especially during the holiday seasons and product promotion campaign.
2. In 2020, the global electric power tool segment and the global electric outdoor power equipment segment accounted for approximately 74.1% and approximately 18.6% of the global power tool market and the global outdoor power equipment market, respectively.

Source: Frost & Sullivan Analysis and Estimates

Company Profiles (1/22)

CHERVON

Year of Establishment	1994
Product Line	Hand-held portable power tools, stationary bench tools, laser and electronic tools, cordless outdoor power equipment and accessories
R&D Expenses as % of Revenue (2020)	3.2%
Manufacturing Footprint	Region: Europe, China, Vietnam

- CHERVON founded in 1994 and is a company manufactures power tools and outdoor gardening equipment and accessories. The company focuses on hand-held portable power tools, stationary bench tools, laser and electronic equipment and outdoor power equipment. With Company's R&D development, testing and manufacturing capabilities, it is able to provide solutions that can meet their users' expectations. Over the past 25 years, CHERVON has established its brand for continuous contributions and technology progress to the world innovation. Today, more than 30,000 stores in 65 countries are distributing CHERVON-built products. The company take pride in themselves as a TOP player in the global power tool market.
- In order to strengthen its position in the power tool market, CHERVON has expended its brand portfolio by acquiring a historical brand of hundred-year history called SKIL to enhance its brand awareness and technology advancement. Through years of time and effort in international M&As and independent cultivation, the company have successfully established five distinguished brands that penetrate both the high-end and the mass market, and covering the industrial/professional and the consumer market.

Source: Company Disclosure; Frost & Sullivan Analysis and Estimates

Company Profiles (2/22)

Year of Establishment	1985
Product Line	Cordless technology spanning power tools, outdoor power equipment, floor care appliances and accessories
R&D Expenses as % of Revenue (2020)	3.2%
Manufacturing Footprint	Region: Europe, North America, China, Mexico, Vietnam

- Company A was found in 1985 and went public on the Stock Exchange of Hong Kong ("SEHK") in 1990. The company has a wide range of brand portfolio, worldwide manufacturing and product development footprint and with a sales of USD9.8 billion globally in 2020 and a employee number of 48,000.
- Company A has a variety of products including power tools, accessories, hand tools, outdoor power equipment, and floorcare equipment. Its products cover Do-It-Yourself (DIY), professional and industrial users in the home improvement, repair, maintenance, construction and infrastructure industries. As a fast-growing world leader in the power tool market, the Company is dedicated to expediting the evolution of these industries through high-end environmentally friendly battery technology. The Company is widely recognized for its cordless product platforms of superior quality, powerful performance, compelling safety, great productivity and top-class innovation.

Source: Company Disclosure; Frost & Sullivan Analysis and Estimates

Company Profiles (3/22)

Year of Establishment	1886
Product Line	Batteries, chargers & starter kits, band saws, benchtop tools, circular saws, drills, hammer drills & impact drivers, dust extraction and collection, grinders and metalworking, hammers (rotary & demolition), jig saws, measuring and layout tools, oscillating multi-tools, planers, radios, reciprocating saws, sanders, saws, specialty tools, track/plunge saws, workwear, organization systems and solutions, power tool accessories
R&D Expenses as % of Revenue (2020)	8.2%
Manufacturing Footprint	Region: Europe, North America, China

- Set up in Stuttgart, 1886, company B was founded as the “workshop for precision mechanics and electrical engineering”. Benefiting from the special ownership structure, company B cultivated its entrepreneurship, enabling the company to lay out a long term plan and to safeguard of its future while undertaking considerable upfront investments.
- Company B is a leading global supplier of technology and services. Its employees consist of roughly 395,000 associates. Its operations are divided into four business sectors: mobility solutions, industrial technology, consumer goods, and energy and building technology. Company B and its roughly 440 subsidiaries and regional companies locate in some 60 countries. Counting in sales and service partners and its more than 400 global locations, company B’s global manufacturing, engineering, and sales network reaches a number of countries in the world.

Source: Company Disclosure; Frost & Sullivan Analysis and Estimates

Company Profiles (4/22)

Year of Establishment	1843
Product Line	threaded fasteners, blind rivets and tools, blind inserts and tools, drawn arc weld studs and systems, engineered plastic and mechanical fasteners, self-piercing riveting systems, precision nut running systems, micro fasteners, high-strength structural fasteners, axel swage, latches, heat shields, pins, and couplings
R&D Expenses as % of Revenue (2020)	1.5%
Manufacturing Footprint	Region: Europe, North America, Asia

- Founded in 1843 company C was incorporated in Connecticut in 1852. In March 2010, the company completed a merger with another company, and later incorporated in Maryland in 1910. Today, company C as a leading company in diversified industrial area, is committed to serving the builders, makers and protectors of the world.
- Company C is a global provider of diversified hand tools, power tools and related accessories, engineered fastening systems and products, services and equipment for oil & gas and infrastructure applications, commercial electronic security and monitoring systems, healthcare solutions, and automatic doors. The Company is leading in tools and storage, security services based on revenue and is a global leader in engineered fastening field.

Source: Company Disclosure; Frost & Sullivan Analysis and Estimates

Company Profiles (5/22)

Year of Establishment	1915
Product Line	Cordless power tools, corded power tools, pneumatic power tools, outdoor power equipment, accessories
R&D Expenses as % of Revenue (2020)	2.4%
Manufacturing Footprint	Region: Japan, China, the U.S., the U.K., Germany, Brazil, Romania, and Thailand

- In 1915, company D set up its business in Nagoya as a lighting equipment and electric motor sales and repair company. In the next 106 years since its establishment, company D made through major evolutionary changes in the everchanging global business world and has achieved stable growth as a global manufacturer of a wide range of power tools for turning places into cozy homes and living environments.
- As a global manufacturer of a comprehensive range of tools, company D offers power tools, gardening equipment, and similar products to lay the foundation for its business operation from a global perspective. As a leading company in this industry, it builds an integrated framework which comprises development, manufacturing, sales, and after-sales services that deliver high-quality products and services that satisfy its customers.

Source: Company Disclosure; Frost & Sullivan Analysis and Estimates

Company Profiles (6/22)

Year of Establishment	1941
Product Line	Anchor Systems, measuring systems, power tools & accessories, tool services, direct fastening & screw fastening, fastening & protection solution, firestop systems, installation systems, diamond systems
R&D Expenses as % of Revenue (2020)	6.7%
Manufacturing Footprint	Region: Europe, North America, China, India

- Since its foundation in 1941, company E, based in Schaan, Liechtenstein, has always been planning with long-term financial perspective. Company E has around 30,000 employees across the globe, in more than 120 countries, providing tools that can make construction sites easier, quicker and safer and convenience for customers every single day with products, system solutions, software and services that offer value-added help. Having coarsely 250,000 individual customer interactions per day, company E interacts with its customers nearly everyday to get the feedback and improve its product performance.
- Company E each year develops more than 60 products to promote its innovative progress, an increasing number of which are associated with internet-based technologies. Despite COVID-19, company E still launched onto the market 74 new, innovative products and services.

Source: Company Disclosure; Frost & Sullivan Analysis and Estimates

Company Profiles (7/22)

Year of Establishment	1920
Product Line	Drills and drivers
R&D Expenses as % of Revenue (2020)	N/A
Manufacturing Footprint	Region: China, Europe

- Company F, headquartered in Tokyo, Japan, is a supplier of high performance power tools. Founded in the 1920s, company F produces a variety of power tools, including drills, drivers and saws.
- In 1999, during restructuring measures, company F acquired another company in Northern Germany. Incorporated with the takeover of two other (woodworking) machine manufacturers, this briefly made company F the leading producer of stationary woodworking machines globally. However, in the next decade, the Company changed its focus on manufacturing smaller power tools. In 2004, company F restructured its manufacturing base and established a new plant in Shanghai.
- On March 1, 2016 company F was acquired and was sold in March 2017 to an investment firm.

Source: Company Disclosure; Frost & Sullivan Analysis and Estimates

Company Profiles (8/22)

Year of Establishment	1873
Product Line	Compressors, air treatment systems, vacuum solutions, industrial power tools and assembly systems, machine vision, and power and flow solutions
R&D Expenses as % of Revenue (2020)	3.8%
Manufacturing Footprint	Region: Belgium, Spain, the United States, China and India

- Founded in 1873, Company G is a Stockholm-based Sweden sustainable productivity solution providers, specializing in providing products and services including compressors, air treatment systems, vacuum solutions, industrial power tools and assembly systems, machine vision, power and flow solutions and 24/7 rental solutions. It has four business segments, namely, compressor technique, vacuum technique, industrial technique, power technique
- It has more than 40,000 employees and customers spanning more than 180 countries. Company G focus business in a decentralized organization with professional personnel and flexible and asset-light manufacturing setup.

Source: Company Disclosure; Frost & Sullivan Analysis and Estimates

Company Profiles (9/22)

Year of Establishment	1995
Product Line	Screwdrivers and chainsaws, sanders, grinders, cutters, spraying units, water pump, lawn mower, welder, etc.
R&D Expenses as % of Revenue (2020)	N/A
Manufacturing Footprint	Region: China

- Founded in 1995, Company H is a PRC-based provider of power tools and outdoor power equipment (such as screwdrivers and chainsaws), armatures, stators and related spare parts, which are used in the fields of building construction, home decoration, stone processing, ship building and water conservatory projects.
- Company H has more than 5,000 employees with a sales network covering more than 60 countries and regions. The Company is one of the member of China Electrical Equipment Industry Association (CEEIA) and has a complete industrial manufacturing base with modern manufacturing plants and top-class manufacturing and examine facilities.

Source: Company Disclosure; Frost & Sullivan Analysis and Estimates

Company Profiles (10/22)

Year of Establishment	1920
Product Line	Cordless (battery), pneumatic (air), hydraulic and corded (electric) tools, such as impact wrenches, ratchets, screwdrivers, drills, sanders, grinders and similar products
R&D Expenses as % of Revenue (2020)	1.5%
Manufacturing Footprint	Region: Argentina, Belarus, Brazil, China, England, Hungary, Italy, Portugal, Spain, Sweden

- Founded in 1920, company I has been providing professional tools for serious professionals, the makers and the fixers, performing important tasks. Across the globe, the makers and the fixers are among the crucial workers who create and fix the infrastructure that makes our continuing way of life possible.
- As a leading global innovator, producer and provider of services in selling tools, equipment, diagnostics, repair information and systems solutions for professional users performing important tasks, company I's products and services include hand and power tools, tool storage, diagnostics software, handheld and PC-based diagnostic products, information and management systems, shop equipment and other solutions for vehicle dealerships and repair centers, as well as for customers in industries, such as aviation and aerospace, agriculture, construction, government and military, mining, natural resources, power generation and technical education. Company I also generates income from its various financing programs designed to facilitate the sales of its products and support its franchise business.

Source: Company Disclosure; Frost & Sullivan Analysis and Estimates

Company Profiles (11/22)

Year of Establishment	2002
Product Line	Lawn mowers, robotic lawn mowers, trimmers & edgers, cultivators & dethatchers, pressure washers, hedge trimmers, chainsaws, power tools, leaf blowers, snow blowers, garden carts, accessories
R&D Expenses as % of Revenue (2020)	N/A
Manufacturing Footprint	Region: China, the United States

- As a leading player in the industry, company J provides cordless outdoor power tools for both DIY-consumers and landscaping professionals. The company not only distributes products under its own brand but also manufactures private label products, as well as products of an extensive range as an original equipment manufacturer. With a robust lineup of 24V, 40V, 60V, 80V products, and commercial-grade 82V cordless outdoor power equipment, a full line of corded equipment and reel mowers, company J provides the right tool for various jobs.
- Applying world-class technology, company J's tools enhance the power and performance of comparable gas-powered tools without the mess, noxious fumes, stamina-reducing vibration and noise associated with gas products.

Source: Company Disclosure; Frost & Sullivan Analysis and Estimates

Company Profiles (12/22)

Year of Establishment	1994
Product Line	Drills and drivers, rotary hammers, impact drivers and wrenches, reciprocating saws, jigsaws, compact circular saws, sanders, angle grinders, tool accessories, work tables
R&D Expenses as % of Revenue (2020)	N/A
Manufacturing Footprint	Region: Europe, North America, Asia Pacific, Middle east, Africa

- Founded in 1994, company K started it business first as an original equipment manufacturing facility producing products for the big brands in the market. Later, after it developed some technologies through the continuous collaboration with the big brands, it began to produce its own brands and through acquiring other brands to establish itself in the market.
- The Company is known for its high quality manufacturing product lines and its massive production capabilities. Utilizing its advantages, the Company now has made itself known in the market and is continuing in developing new technologies and products while maintaining its original equipment manufacturing business which can provide a steady cash flow to substantiate its long term strategic planning.

Source: Company Disclosure; Frost & Sullivan Analysis and Estimates

Company Profiles (13/22)

Year of Establishment	1620
Product Line	Chainsaws, hedge trimmers, leaf blowers, lawn mowers, robotic lawn mowers, snow blowers, string trimmers, zero-turn mowers
R&D Expenses as % of Revenue (2020)	4.1%
Manufacturing Footprint	30 production facilities, 20 in Europe, 4 in the US, 3 in China, 1 in Brazil, Japan and Australia

- Company L, a manufacturer in Sweden that produces outdoor power products including chainsaws, trimmers, brush cutters, cultivators, garden tractors, and mowers. Headquarter located in Stockholm, Sweden, the group also offers consumer with watering products, cutting equipment and diamond tools for the construction and stone industries.
- As a global producer, company L's products include outdoor power equipment for forest, park and garden care, watering products and cutting and surface preparation equipment for the construction business. Its products covers both the professional market and the consumer market and its business is operated mostly in Europe and the U.S.

Source: Company Disclosure; Frost & Sullivan Analysis and Estimates

Company Profiles (14/22)

Year of Establishment	1926
Product Line	Chainsaws, trimmers and blowers
R&D Expenses as % of Revenue (2020)	N/A
Manufacturing Footprint	Region: China, Brazil, Austria, Switzerland, the United States, the Philippines, Germany

- Founded in 1926, Waiblingen, Germany, company M is a company focuses on outdoor power equipment for residential use. Through its multiple product development, it has established itself in several product lines, such as chainsaws, trimmers and blowers. In line with the market trend, the Company has strategically been investing in its battery product development as well. It now has three series of cordless products: AI series, AP series and AK series. It has manufacturing facilities across the globe, including Europe, Asia Pacific and North America.

Source: Company Disclosure; Frost & Sullivan Analysis and Estimates

Company Profiles (15/22)

Year of Establishment	1932
Product Line	Lawn mowers, snow blowers, trimmers, pressure washers, tillers, cultivators
R&D Expenses as % of Revenue (2020)	N/A
Manufacturing Footprint	Region: Europe, North America, Asia Pacific

- Company N is a leader in outdoor power equipment with brands and products of good quality such as Cub Cadet, Bolens, Troy-Bilt, and Yard Machines. The company offers outdoor power equipment including lawnmowers and snow blowers for both residential and commercial use. One of its brands is a fastest growing brand in the riding mower market in North America and is welcomed global wise for its top-class sports turf equipment. Each of the Company's brand is supported by a strong network of the Company's sales, service and support.

Source: Company Disclosure; Frost & Sullivan Analysis and Estimates

Company Profiles (16/22)

Year of Establishment	1914
Product Line	Professional turf maintenance equipment, turf irrigation systems, landscaping equipment and lighting products, snow and ice management products, agricultural irrigation systems, rental, specialty and underground construction equipment, residential yard and snow thrower product
R&D Expenses as % of Revenue (2020)	3.7%
Manufacturing Footprint	Region: Europe, North America

- Company O is an American company founded on July 10, 1914. It builds engines for the market-leading farm tractors in the United States – The Bull Tractor Company. Story of its name is because of the company's association with Bull. In 1935 in Minnesota, company O was incorporated, to success the heritage of another business which was established in 1914 and reincorporated itself in 1983. In 1942, company O stopped its manufacturing of domestic products to produce goods to support the U.S. war effort during WWII, after having successfully established itself as a global leader in the golf and all phases of the professional and fledgling residential mower industries.
- Company O is an American company that develops, produces, and sales a range of turf maintenance equipment, snow removal equipment, and irrigation system supplies for commercial and residential gardens, public parks, golf courses, sports fields, and agricultural fields.

Source: Company Disclosure; Frost & Sullivan Analysis and Estimates

Company Profiles (17/22)

Year of Establishment	2002
Product Line	Grinders, impact drills, shredders, pruning shears, electric chain saws, etc.
R&D Expenses as % of Revenue (2020)	N/A
Manufacturing Footprint	Region: China

- Established in 2002, company P is a PRC-based modern manufacturing enterprise specializing in garden machinery, electric tools and intelligent products.
- The company currently has more than 1,800 employees, including 150 people on the research and development team. The company has obtained 92 invention patents and 380 utility model patents. Company P has approximately 100 first-line brand customers and thousands of domestic terminal sales store partners worldwide.

Source: Company Disclosure; Frost & Sullivan Analysis and Estimates

Company Profiles (18/22)

Year of Establishment	1837
Product Line	Tractors, riding lawn equipment, golf course equipment, utility vehicles, and commercial mowing equipment, loaders, excavators, motor graders, articulated dump trucks
R&D Expenses as % of Revenue (2020)	4.6%
Manufacturing Footprint	Region: Europe, North America, Asia Pacific, South America

- Founded in 1837, company Q is an American company that manufactures lawn mower, loader, excavator and other outdoor power equipment mainly for commercial use. Since its establishment in 1837, the Company has been providing professional users with high quality products that can make their work easier with higher efficiency. Through high-technology development, it has been a market leader in the professional field for around two centuries.

Source: Company Disclosure; Frost & Sullivan Analysis and Estimates

Company Profiles (19/22)

Year of Establishment	1947
Product Line	Chain saws, cutters, blowers, hedge trimmers, dusters
R&D Expenses as % of Revenue (2020)	N/A
Manufacturing Footprint	Region: Japan, China, the United States

- Established in 1947, company R is a Japan-based company listed on the Tokyo Stock Exchange manufacturing and selling outdoor power equipment and agricultural machinery and industrial machinery.
- The company has a global manufacturing footprint across Asia and America and is famous for its backpack power blowers and hand-held hedge trimmers, leaf blowers and chain saws.

Source: Company Disclosure; Frost & Sullivan Analysis and Estimates

Company Profiles (20/22)

Year of Establishment	1923
Product Line	Lawn vacuums, turf-maintenance vehicles
R&D Expenses as % of Revenue (2020)	N/A
Manufacturing Footprint	The United States, Canada, U.K., Europe, China, Japan

- Company S is an America-based multi-industry company including aviation, bell, finance, industrial and systems. Founded in 1923 and headquartered in Providence, Rhode Island, the company has more than 33,000 employees and business operations in various regions worldwide. It's outdoor power equipment business mainly manufactures specialized turf-care vehicles.

Source: Company Disclosure; Frost & Sullivan Analysis and Estimates

Company Profiles (21/22)

Year of Establishment	1933
Product Line	Snow blowers, riding mowers, walk behind mowers, power brushes
R&D Expenses as % of Revenue (2020)	N/A
Manufacturing Footprint	The United States, U.K., Europe

- Company T started its business in 1933 in Brillion, Wisconsin and is a power tool provider mainly manufactures snow blowers, lawn mowers, power brushes.
- It now employs more than 1,500 people in the United States, U.K. and Norway and is a private and family-owned company.

Source: Company Disclosure; Frost & Sullivan Analysis and Estimates

Company Profiles (22/22)

Year of Establishment	2012
Product Line	Drills, cordless and corded screwdrivers, hammers, grinders, saws, mixers, chain saws, blowers, welders, laser levels, nailers, staplers, pullers
R&D Expenses as % of Revenue (2020)	N/A
Manufacturing Footprint	China

- Established in 2012, company U is a China-based power tool provider designs and manufactures electric power tools, pneumatic power tools., outdoor power equipment and welders. It has two manufacturing bases in China of more than 100,000 square meters and have invested more than RMB2 billion in the third manufacturing base construction.

Source: Company Disclosure; Frost & Sullivan Analysis and Estimates

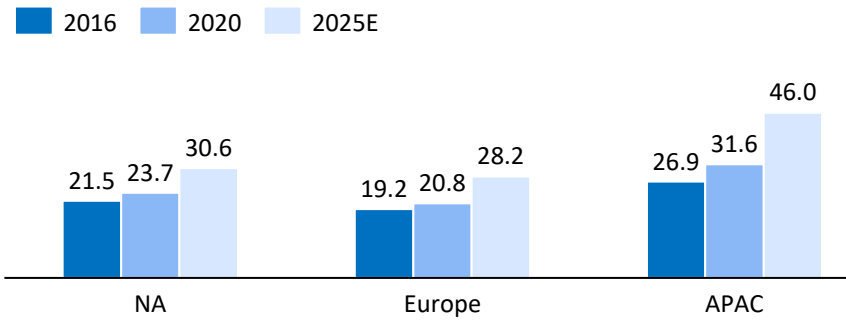
Agenda

1. Overview of Global Power Tool Market
2. Overview of Global Outdoor Power Equipment Market
3. Competitive Landscape Overview
4. Appendix

Nominal GDP and Per Capita Nominal GDP (Major Regions)

Nominal GDP

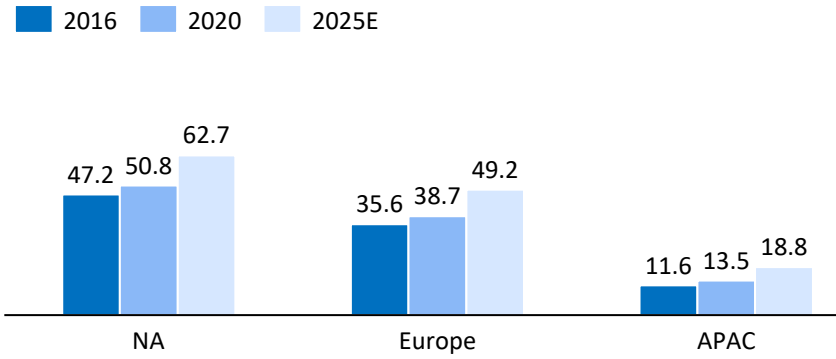
USD Trillion, 2016-2025E



CAGR	NA	Europe	APAC	Middle East	South America	Africa
2016-2020	2.6%	2.0%	4.2%	3.1%	-5.8%	1.6%
2020-2025E	5.2%	6.3%	7.8%	5.6%	6.7%	8.2%

Per Capita Nominal GDP

USD Thousand, 2016-2025E



CAGR	NA	Europe	APAC	Middle East	South America	Africa
2016-2020	1.8%	2.2%	3.9%	0.0%	-0.2%	0.6%
2020-2025E	4.3%	4.9%	6.8%	3.2%	4.3%	3.7%

- Over the past five years, NA'S economy increased from approximately USD21.5 trillion to approximately USD23.7 trillion at a CAGR of 2.6%. As the world's largest economic region by nominal GDP, APAC's nominal GDP increased from approximately USD26.9 trillion in 2016 to approximately USD31.6 trillion in 2020 at a CAGR of approximately 4.2%. Compared to other developed economies, APAC's per capita nominal GDP was relatively low and increased from approximately USD11.6 thousand in 2016 to approximately USD13.5 thousand in 2020 at a approximately CAGR of 3.9%. Driven by a series of economic stimulus policies and the "new norm" of China's economy, the per capita nominal GDP in APAC is expected to continuously grow at a CAGR of approximately 6.8% from 2020 to 2025, reaching approximately USD18.8 thousand by 2025.

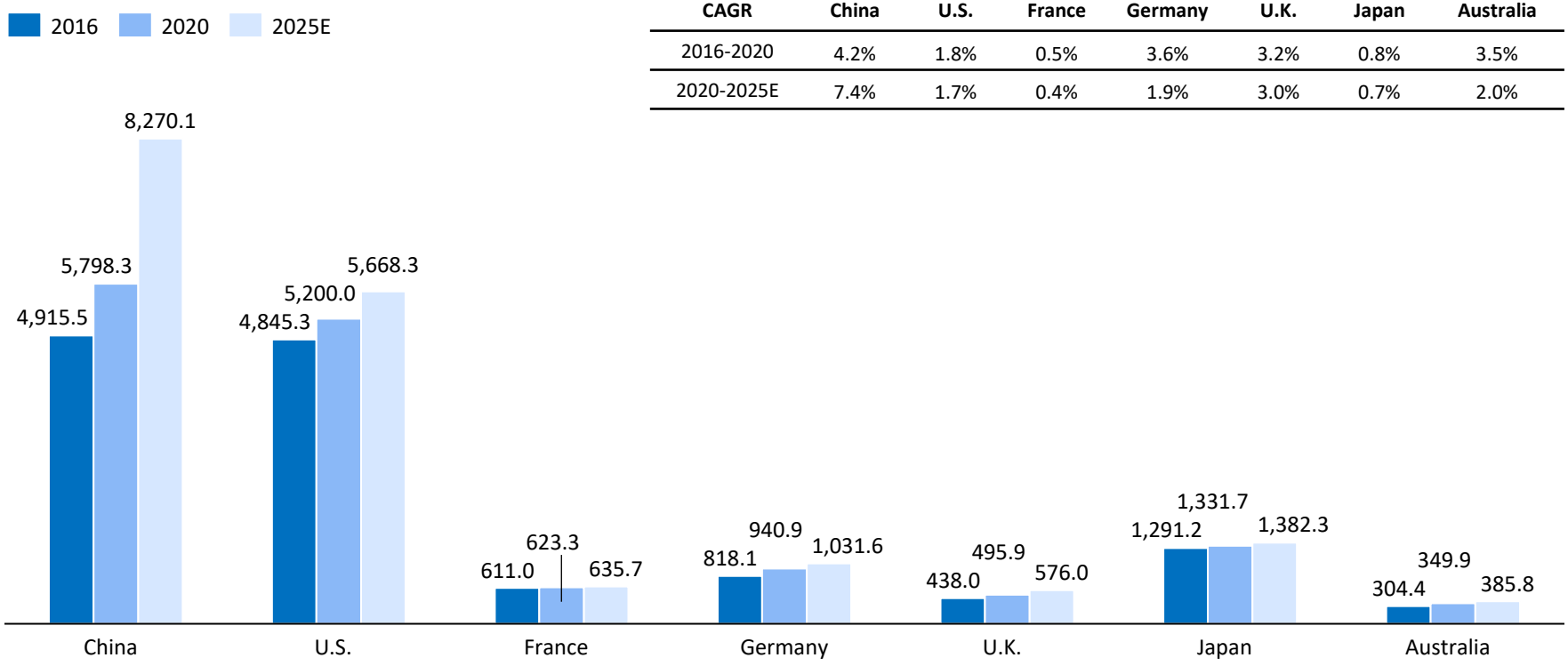
Source: International Monetary Fund; Frost & Sullivan Analysis and Estimates

Total Retail Sales Value of Consumer Goods (Major Economies)

Total Retail Sales Value of Consumer Goods (Major Economies)

USD Billion, 2016-2025E

CAGR	China	U.S.	France	Germany	U.K.	Japan	Australia
2016-2020	4.2%	1.8%	0.5%	3.6%	3.2%	0.8%	3.5%
2020-2025E	7.4%	1.7%	0.4%	1.9%	3.0%	0.7%	2.0%



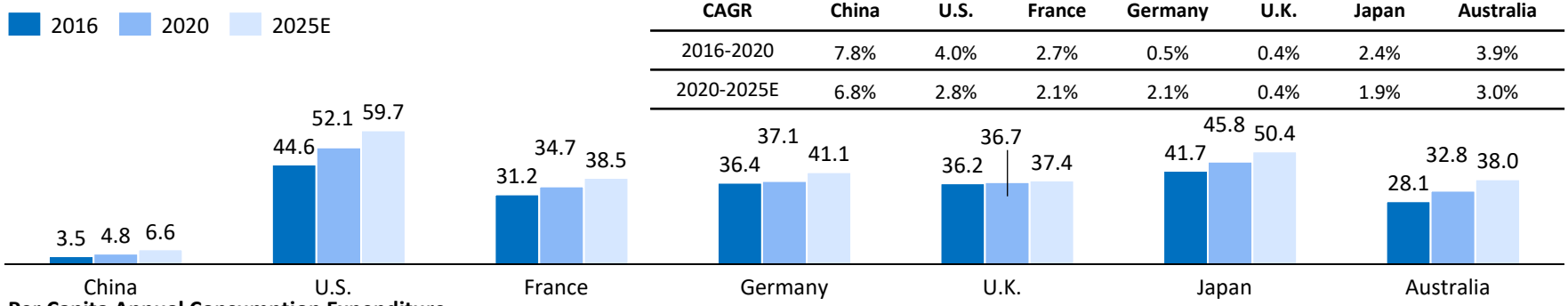
- The total retail sales value of consumer goods in China experienced stable growth mainly attributable to the increase of residents' income level, echoed with the increase of their consumption power, surging to approximately USD5,798.3 billion in 2020 from approximately USD4,915.5 billion in 2016 at a CAGR of approximately 4.2%. Considering the moderate economic outlook and robust domestic consumption demand, the total retail sales value of consumer goods in China is forecasted to reach approximately USD8,270.1 billion by 2025, representing a CAGR of approximately 7.4% from 2020 to 2025. Compared to other developed economies, China's total retail sales values of consumer goods, far above others, represents enormous demand for consumption.

Source: National Bureau of Statistics of China; U.S. Bureau of Economic Analysis; Ministry of Economy; Trade and Industry of Japan; Frost & Sullivan Analysis and Estimates

Per Capita Annual Disposable Income and Consumption Expenditure (Major Economies)

Per Capita Annual Disposable Income

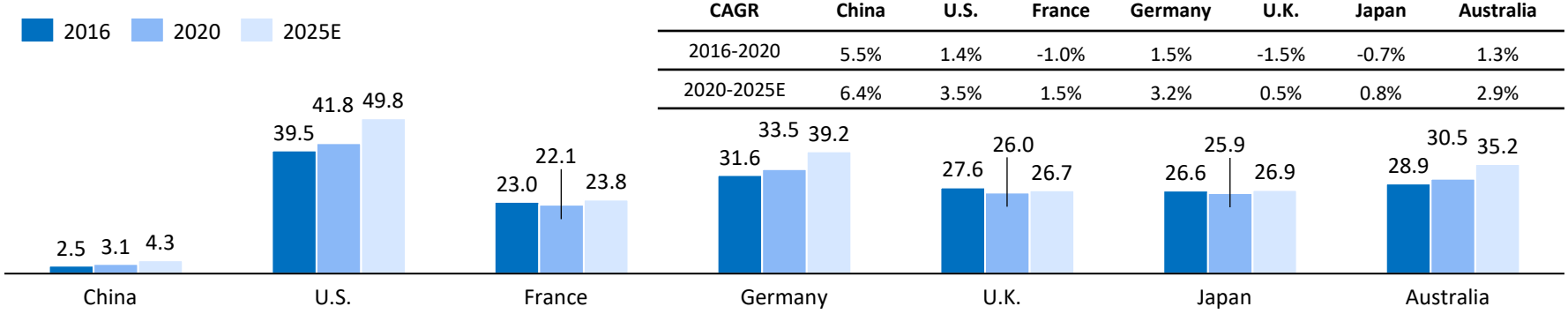
USD Thousand, 2016-2025E



CAGR	China	U.S.	France	Germany	U.K.	Japan	Australia
2016-2020	7.8%	4.0%	2.7%	0.5%	0.4%	2.4%	3.9%
2020-2025E	6.8%	2.8%	2.1%	2.1%	0.4%	1.9%	3.0%

Per Capita Annual Consumption Expenditure

USD Thousand, 2016-2025E

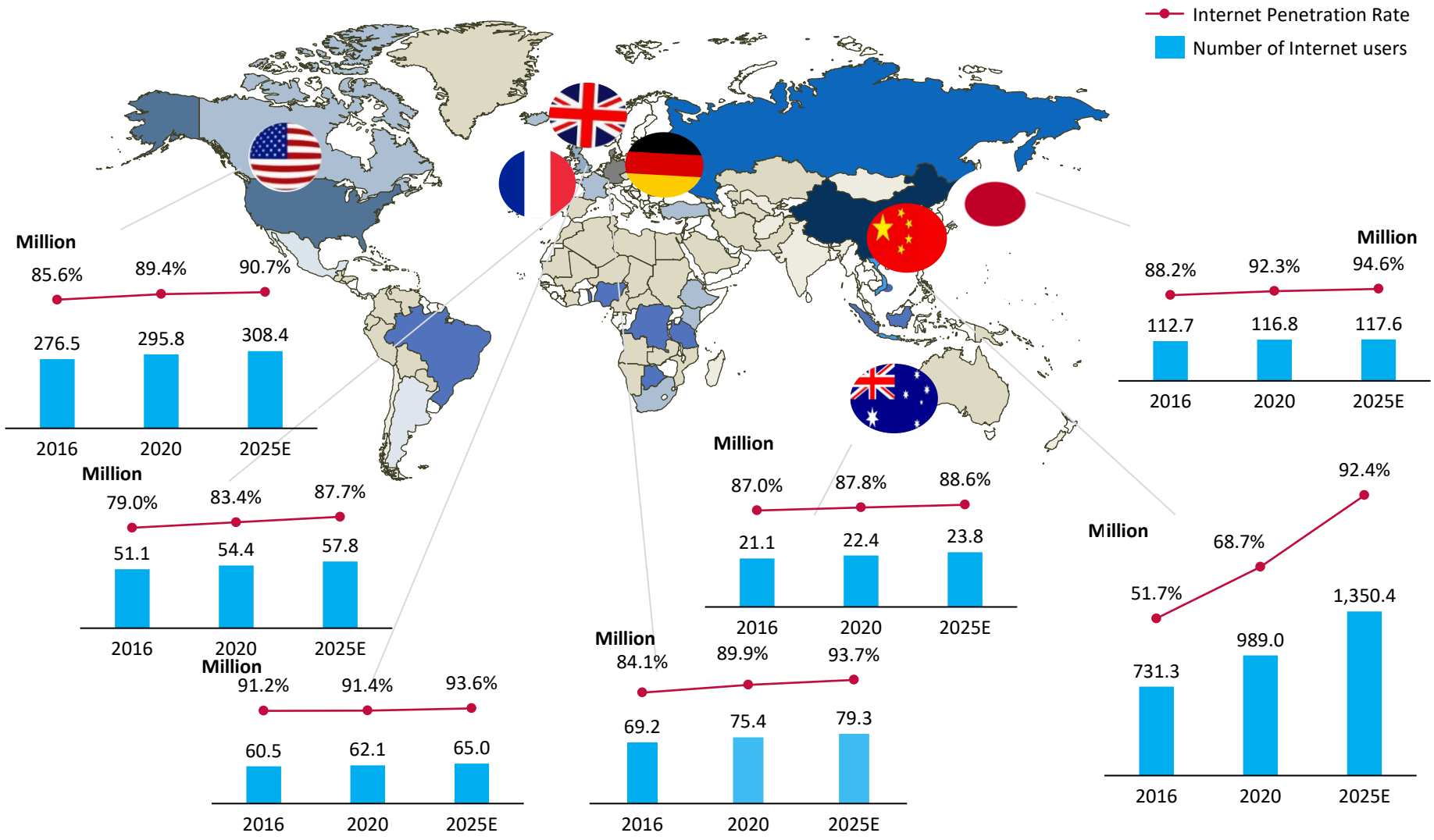


CAGR	China	U.S.	France	Germany	U.K.	Japan	Australia
2016-2020	5.5%	1.4%	-1.0%	1.5%	-1.5%	-0.7%	1.3%
2020-2025E	6.4%	3.5%	1.5%	3.2%	0.5%	0.8%	2.9%

- As the world's largest economy by nominal GDP, U.S. has a highly diversified, world-leading industrial sector and service sector, which contributed to relatively high income level of American residents. The per capita annual disposable income increased from approximately USD44.6 thousand in 2016 to approximately USD52.1 thousand in 2020 with a CAGR of 4.0%. In parallel, the per capita annual consumption expenditure increased from approximately USD39.5 thousand in 2016 to approximately USD41.8 thousand in 2020 with a CAGR of 1.4%. Compared to the U.S., Chinese residents had a relatively lower per capita annual disposable income due to its large population size, yet the figure experienced a relatively fast growth rate of 7.8%, increasing from approximately USD3.5 thousand in 2016 to approximately USD4.8 thousand in 2020.

Source: National Bureau of Statistics of China; The World Bank; International Monetary Fund; Federal Statistical Office Germany; Frost & Sullivan Analysis and Estimates

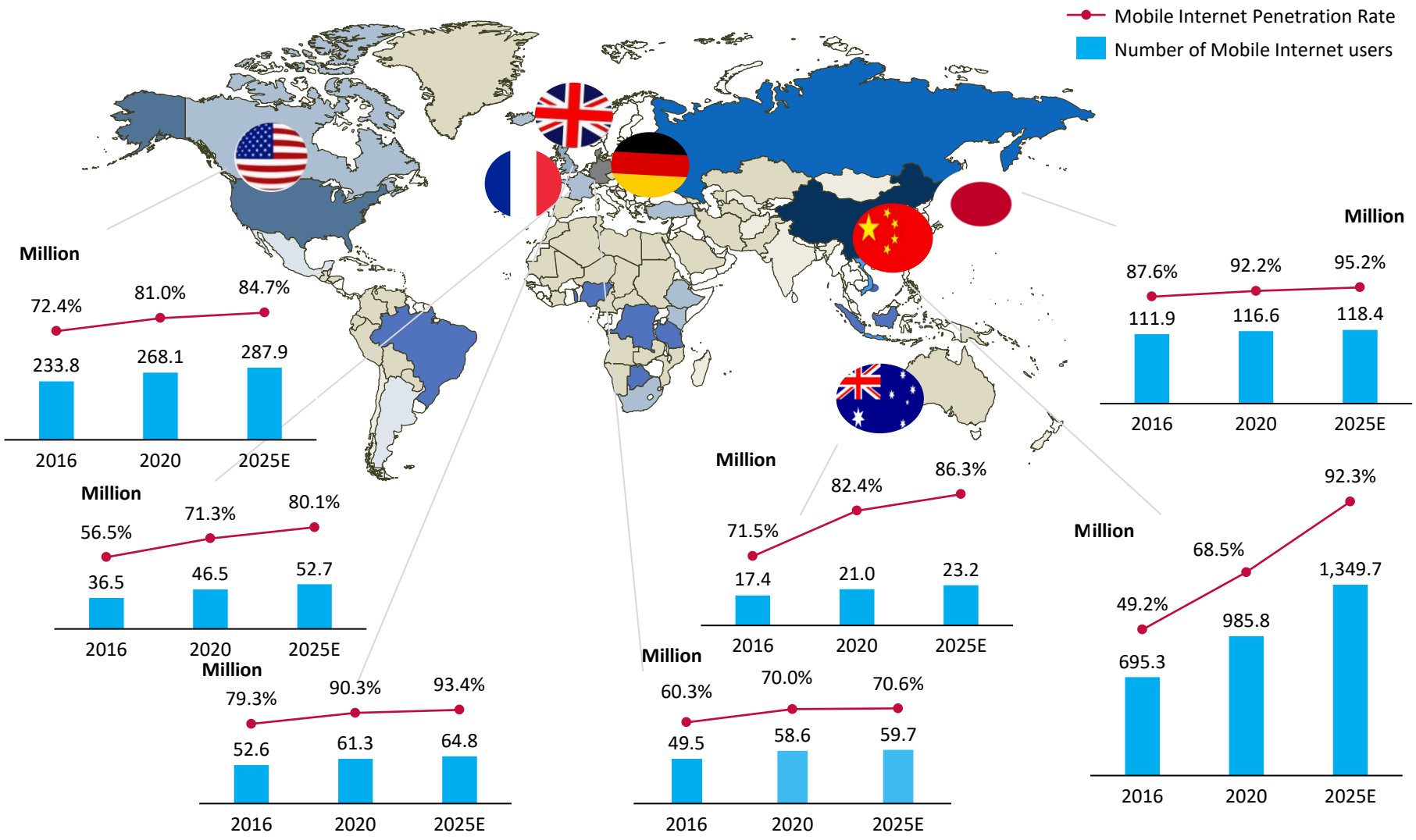
Number of Internet Users & Internet Penetration Rate (Major Economies)



Source: The World Bank; International Monetary Fund; EMarketer; Frost & Sullivan Analysis and Estimates

Note: The Internet Penetration Rate refers to the percentage of Internet User to the population

Number of Mobile Internet Users & Mobile Internet Penetration Rate (Major Economies)



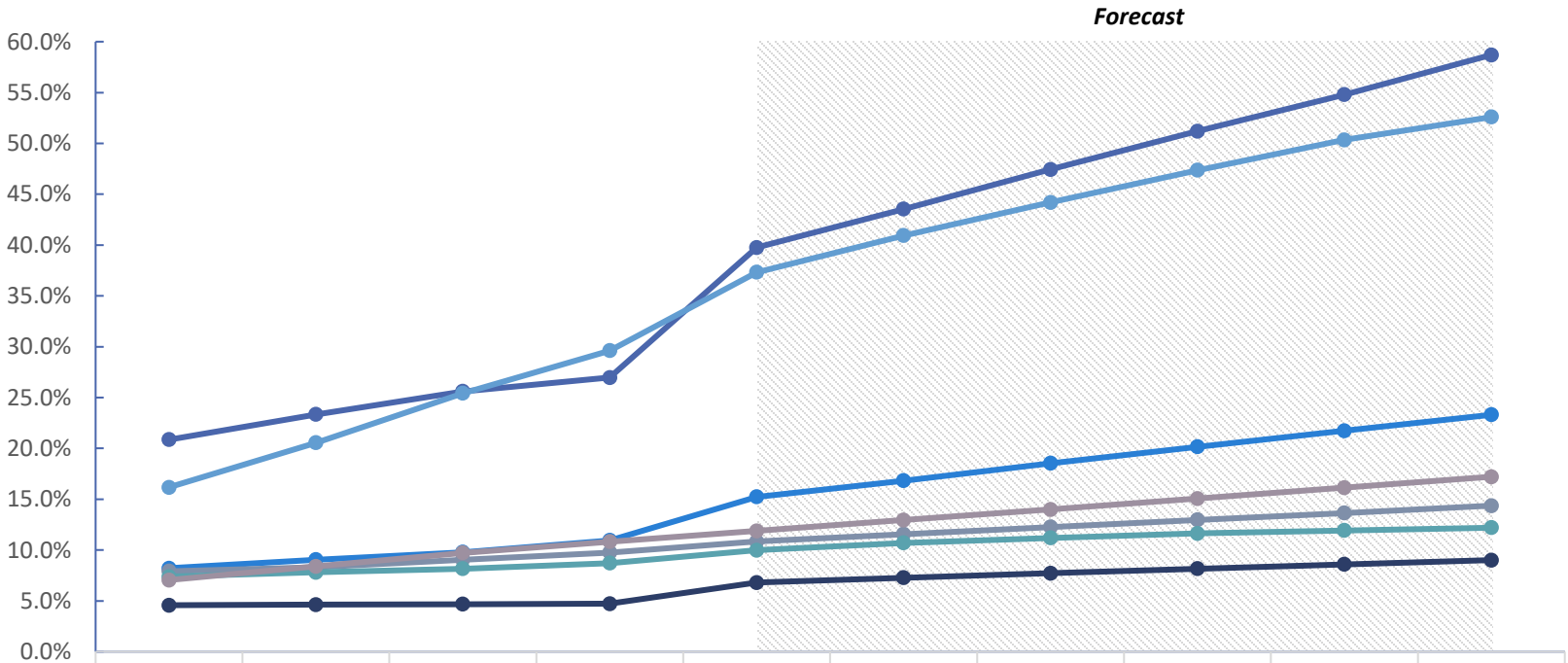
Source: The World Bank; International Monetary Fund; EMarketer; Frost & Sullivan Analysis and Estimates

Note: The Mobile Internet Penetration Rate refers to the percentage of Mobile Internet User to the population

E-commerce Penetration Rate (Major Economies)

E-commerce Penetration Rate (Major Economies)

2016-2025E



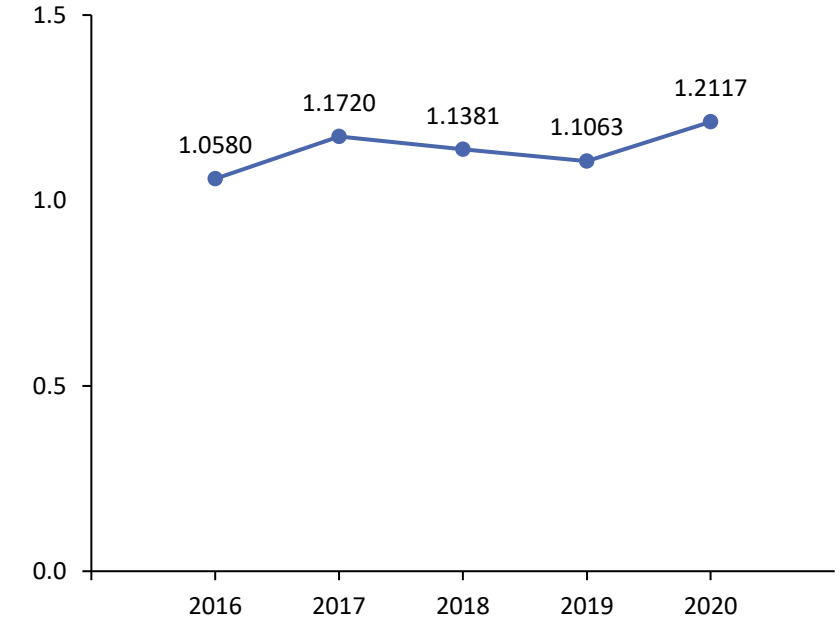
	2016	2017	2018	2019	2020	2021E	2022E	2023E	2024E	2025E
U.K.	20.9%	23.3%	25.6%	27.0%	39.8%	43.5%	47.4%	51.2%	54.8%	58.7%
China	16.2%	20.6%	25.4%	29.6%	37.3%	40.9%	44.2%	47.4%	50.3%	52.6%
U.S.	8.2%	9.0%	9.8%	10.9%	15.2%	16.8%	18.5%	20.2%	21.7%	23.3%
Japan	7.9%	8.3%	9.0%	9.7%	10.8%	11.5%	12.3%	13.0%	13.6%	14.4%
Germany	7.4%	7.8%	8.2%	8.7%	10.0%	10.7%	11.2%	11.6%	11.9%	12.2%
France	7.0%	8.4%	9.7%	10.8%	11.9%	12.9%	14.0%	15.1%	16.1%	17.2%
Australia	4.6%	4.6%	4.7%	4.7%	6.8%	7.3%	7.7%	8.2%	8.6%	9.0%

Source: EMarketer; Frost & Sullivan Analysis and Estimates

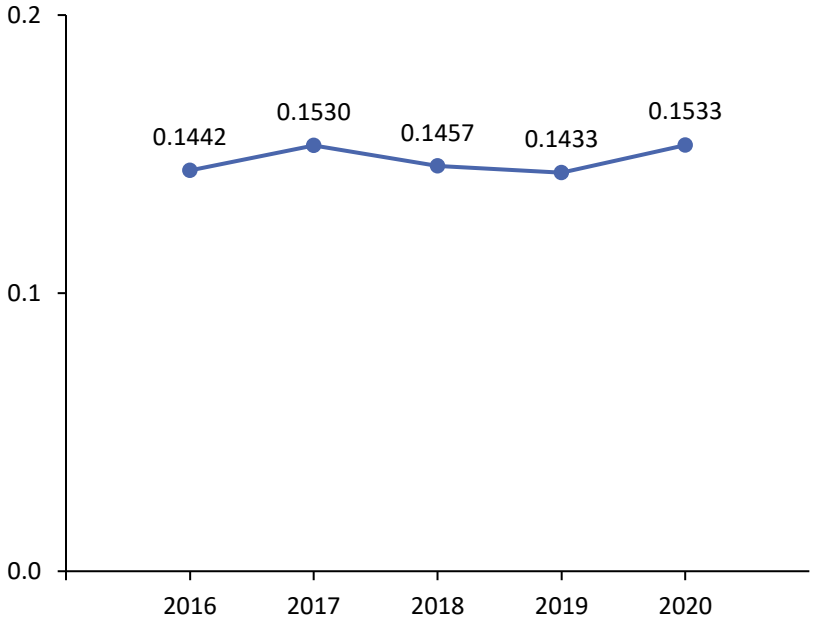
Note: The E-commerce Penetration Rate refers to the percentage of the E-commerce retail sales to total retail sales value

Foreign Exchange Analysis - Euro to RMB and USD to RMB

Euro to USD
2016-2020



RMB to USD
2016-2020



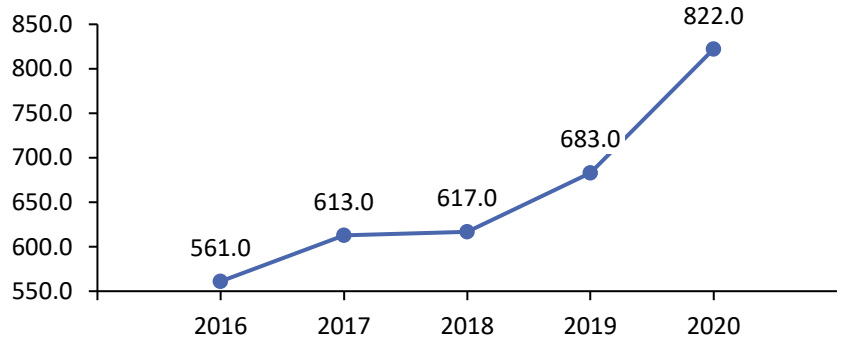
- The Euro/USD exchange rate showed an upward trend from 2016 to 2017, partially because of the depreciation on the USD side due to government's planning to stimulate export. On the other hand, the expansion of the EU alliances in international trade and robust economic performance further strengthen the Euro in relation to USD. However, 2019 was a tough year for Euro since the break-up with United States in certain commodity trades. The year of 2020 came as a rebound thanks to the quick development of COVID-19 vaccine which followed by the quick economic recovery from the pandemic.
- Due to the trade war, the RMB/USD illustrated an downward trend since 2017, bottomed in 2019 at 0.1433 and rose in 2020 to 0.1533. The increase in 2020 was attributable to the severe economic condition caused by the pandemic and the according monetary policy implemented by American government. For China, the RMB went up during 2020 attributable to the well control of the domestic COVID-19 and the stable economic growth compared to other part of the world.

Source: United States Federal Reserve; The People's Bank of China

Housing Market (Major Economies) [1/2]

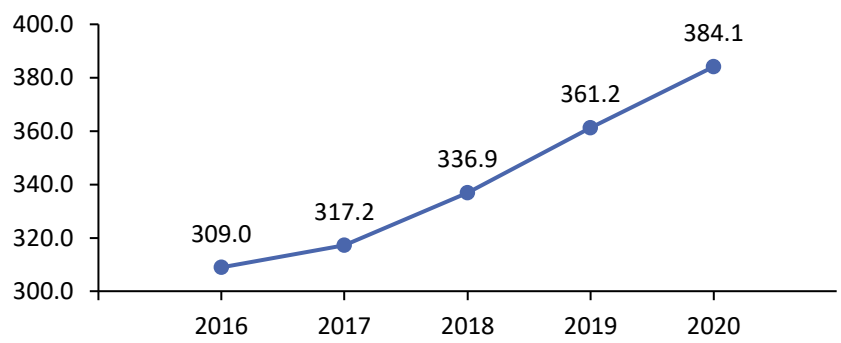
New Resident Sales (U.S.)

Thousand, 2016-2020



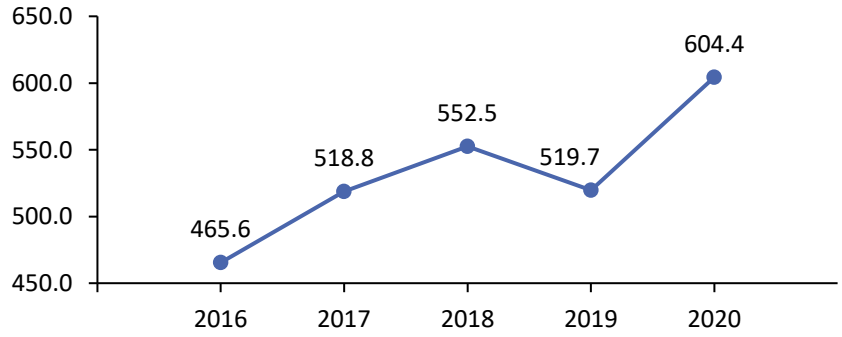
Government Expenditure on Infrastructure (U.S.)

USD Billion, 2016-2020



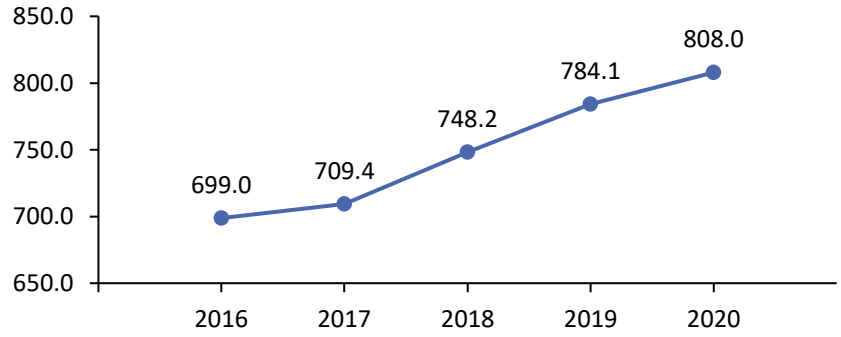
Value of Residential Construction Put in Place (U.S.)

USD Billion, 2016-2020



Value of Nonresidential Construction Put in Place (U.S.)

USD Billion, 2016-2020

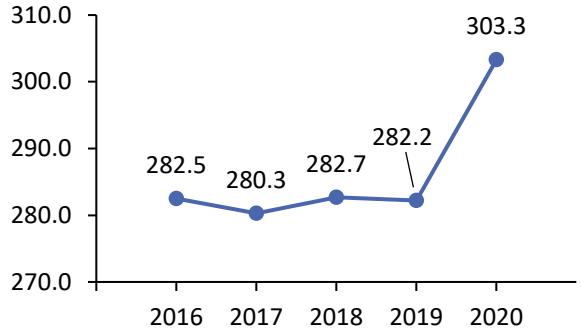


- The past five years witnessed robust growth within the U.S. real estate sector. The upward trend continued during the pandemic in that multiple stimulus packages and loose monetary policies implemented by the U.S. government further strengthened the real estate growth. The value of residential and nonresidential construction put in place in the United States increased from approximately USD465.6 billion and approximately USD699.0 billion in 2016 to approximately USD604.4 billion and approximately USD808.0 billion in 2020, respectively. The continuation of the trend mainly is attributable to the low mortgage rates enabling people to borrow at a lower cost during the economic downturn. The housing market turnover has been pushed to historical high and is expected to continue its steady growth going forward.

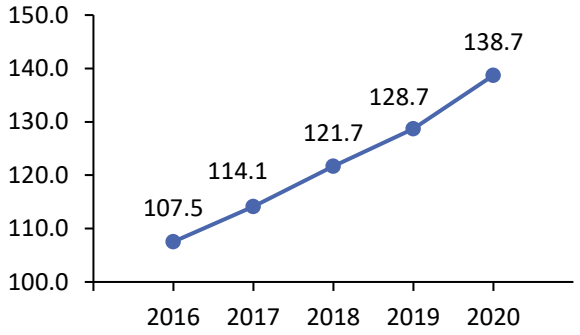
Source: Bureau of Economic Analysis; United States Census Bureau; Wind

Housing Market (Major Economies) [2/2]

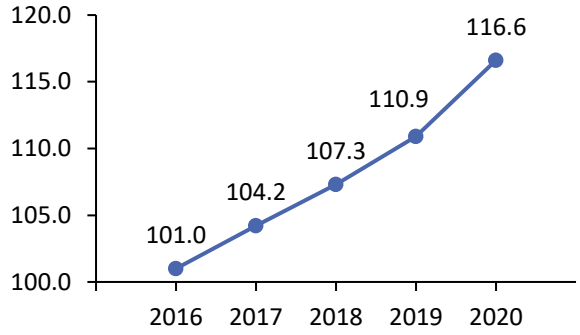
Simple Average Price (U.K.)
GBP Thousand, 2016-2020



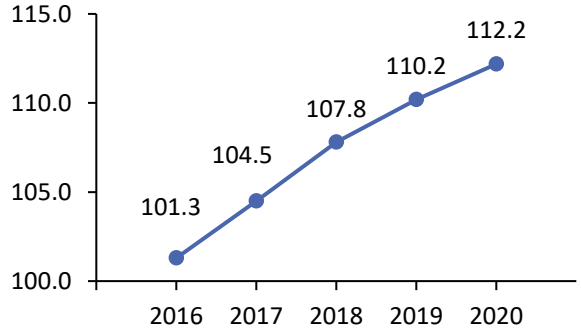
House Price index (Germany)
2016-2020



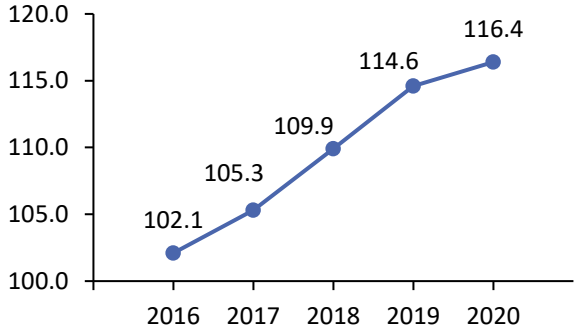
House Price index (France)
2016-2020



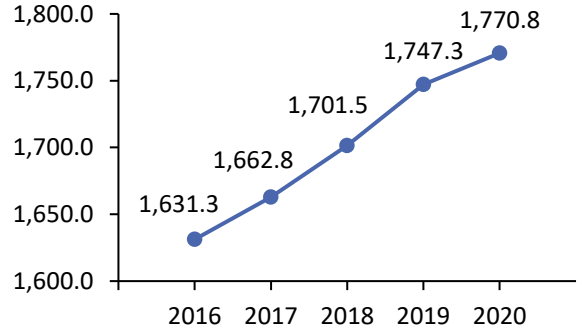
Construction Cost Indices for Residential Buildings (Germany)
2016-2020



Construction Price Indices (Germany)
2016-2020



Cost of Construction Index (France)
2016-2020



- Over the past five years, there has been an increase both in housing markets and construction expenditure in major European countries like United Kingdom, France and Germany, and the upward trend was consistent and steady. The simple average price of housing market in United Kingdom increased from approximately GBP282.5 thousand to approximately GBP303.3 thousand from 2016 to 2020. During the same period, the house price index of Germany and France increased from 107.5 and 101.0 in 2016 to 138.7 and 116.6 in 2020, respectively. In terms of construction cost and construction price, construction cost indices for residential buildings in Germany rose from 101.3 to 112.2 over the past five years while the cost of construction index of France increased from 1,631.3 in 2016 to 1,770.8 in 2020.

Source: United Kingdom Office for National Statistics; German Federal Statistical Office; Eurostat; The French National Institute of Statistics and Economic