



China Yuchai International Limited

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[NYSE: CYD]

March 2025



This presentation may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. The words “believe”, “expect”, “anticipate”, “project”, “targets”, “optimistic”, “confident that”, “continue to”, “predict”, “intend”, “aim”, “will” or similar expressions are intended to identify forward-looking statements. All statements other than statements of historical fact are statements that may be deemed forward-looking statements.

These forward-looking statements including, but not limited to, statements concerning the Company’s operations, financial performance and condition are based on current expectations, beliefs and assumptions which are subject to change at any time. The Company cautions that these statements by their nature involve risks and uncertainties, and actual results may differ materially depending on a variety of important factors such as government and stock exchange regulations, competition, political, economic and social conditions around the world and in China including those discussed in the Company’s Form 20-Fs under the headings “Risk Factors”, “Results of Operations” and “Business Overview” and other reports filed with the Securities and Exchange Commission from time to time. Among others, our business operations and financial condition may be materially and adversely affected due to a deteriorating market for automotive sales, an economic slowdown in China and abroad, a potential weakening of the financial condition of our customers, or other factors that we cannot foresee. All forward-looking statements are applicable only as of the date it is made, and China Yuchai specifically disclaims any obligation to maintain or update the forward-looking information.

Truck and Bus engines applications



Off-road and Agriculture applications



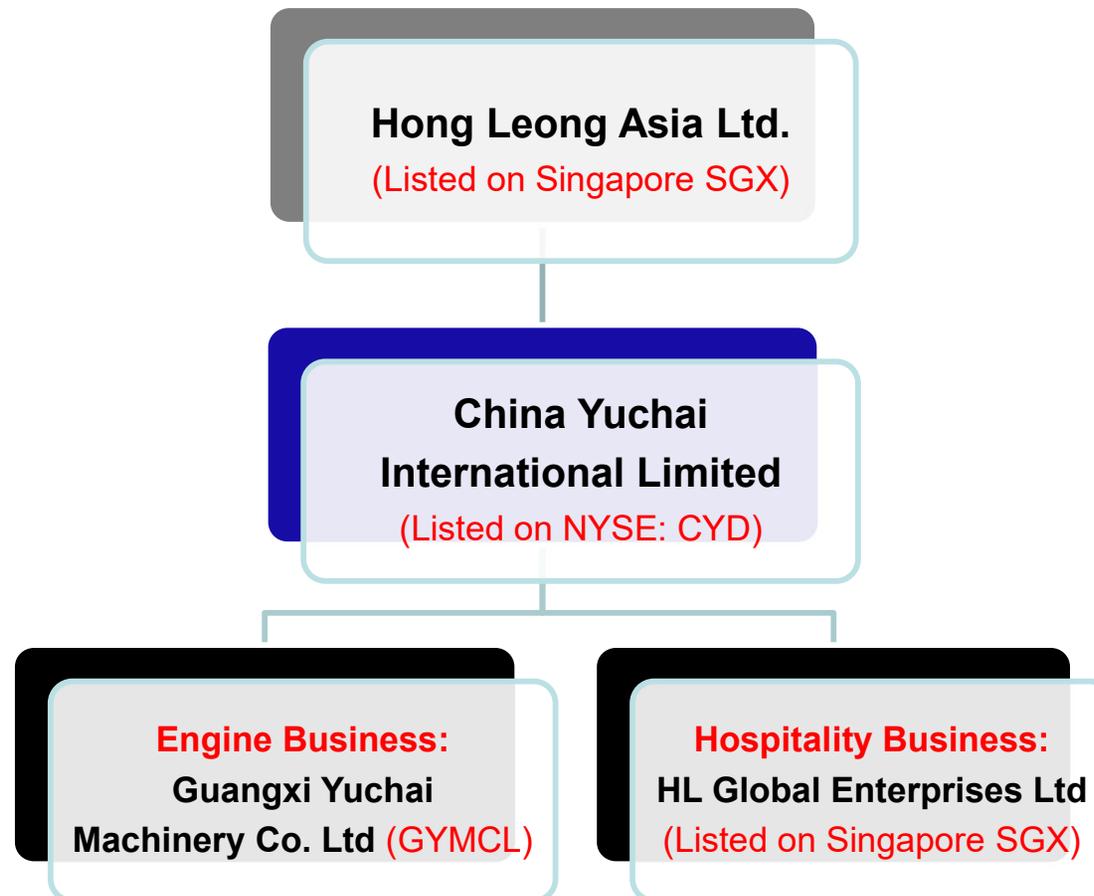
Marine and Power Generation engines applications





Corporate Structure

China Yuchai International Limited (“**China Yuchai**” or the “**Company**”) is a Bermuda holding company established on April 29, 1993, and listed on the New York Stock Exchange under symbol “**CYD**”. It is a subsidiary of Singapore-based Hong Leong Asia Ltd. China Yuchai, through six wholly owned subsidiaries, holds a controlling 76.4% equity interest in its principal operating subsidiary, Guangxi Yuchai Machinery Company Limited (“**Yuchai**” or “**GYMCL**”). It also holds a 48.9% shareholding interest in HL Global Enterprises Limited (“**HLGE**”) which is listed on the main board of the Singapore Exchange.



Founded in 1951, Yuchai as our main operating subsidiary in China, has established a reputable brand name, strong research and development team and significant market share in China.

- **One of the top commercial vehicle engine suppliers in annual unit sales as ranked by the China Association of Automobile Manufacturers (“CAAM”)**
- **Leading manufacturer of a wide array of light-, medium- and heavy-duty engines including diesel, gas, hybrid and alternative fuel engines for multiple markets**
- **Growing product portfolio for the NEV market**
- **Operates one of the single largest comprehensive facilities to produce commercial automotive and industrial engines in China**
- **Engine production facilities are based in both Yuchai and its subsidiaries, total capacity of 600,000 units per annum**
- **World-class R&D program with large patent portfolio**
- **Over 3,000 domestic services stations throughout China**



- **Guangxi Yuchai Marine and Genset Power Co., Ltd. (“MGP”)** is a 93.5% owned subsidiary of Yuchai. MGP specializes in design and manufacture of marine and power generation engines with capacity between 4 to 102 liters, for marine propulsion and power generation, both prime and emergency power applications. Originally a division within Yuchai, MGP was spun off in 2021 and has since emerged as a key component of Yuchai's business portfolio.
- **MTU Yuchai Power Company Limited (“MTU Yuchai”)** is a 50-50 joint venture between MGP and MTU Friedrichshafen GmbH (“MTU”), a subsidiary of Rolls-Royce Power Systems.
- **Guangxi Purem Yuchai Automotive Technology Co., Ltd. (“Purem Yuchai”)** is a 49% owned JV with Purem International GmbH, focused on producing and marketing new exhaust emission control systems for trucks, buses, farming equipment and industrial machinery.
- **Yuchai Simlan Technology Co., Ltd. (“Yuchai Simlan”)** is an 87.7% owned subsidiary that conducts R&D and creates new production capacity for new energy technologies, including fuel cell systems, range extenders, hybrid power and electric drive systems. In 2023, Yuchai Simlan produced new energy power systems for truck, bus and off-road machinery applications.
- **Yuchai Cynland (Jiangsu) Hyentech Co., Ltd.** is a wholly owned subsidiary of Yuchai Simlan incorporated in 2021. It specializes in the design and manufacture of fuel cell battery systems and hydrogen generating equipment.



- **Guangxi SKY Cloud Technology Co., Ltd. (“SKY Cloud”)** is a subsidiary established in 2023 focused on developing proprietary operating systems for data analytics, aimed at smart and connected solutions for both on- and off-road vehicles and machineries. Sky Cloud also manages IT operations and maintenance, and develops new digital projects, as well as intelligent networks and processes for the Yuchai group of entities.
- **Yuchai Power System (Thailand) Co., Ltd.** is a subsidiary incorporated in 2023 to assemble, test and sell diesel engines, gas engines, hybrid engines, range extenders and electric axles. It also provides after-sales services for engine power products (such as maintenance and technical services).
- **Yuchai Xingshunda New Energy Technology Co., Ltd. (“Yuchai Xingshunda”)** is a 65% owned JV with Beijing Xing Shun Da Bus Co., Ltd. for the development, manufacture and sale of fuel cell powertrain systems and fuel cell power components for the Beijing, Tianjin and Hebei markets.
- **Y&C Engine Co., Ltd. (“Y&C”)** is a 45% owned JV with Jirui United Heavy Industry Co., Ltd. and Shenzhen City Jiushi Investment Management Limited, specializing in heavy-duty vehicle engines.
- **Suzhou Yuxing Automobile Technology Co., Ltd.** is a 45% owned JV to provide vehicle monitoring, vehicle and engine maintenance and repairs solutions.
- * **Kim Long Motor Hue (Vietnam)**, a subsidiary of Vietnam's FUTA Group, has been granted technology licenses by Yuchai, which will provide component supply, related support, and services for the construction of a factory to produce licensed engines in Vietnam.



Vehicle Engine OEMs

卡车



Truck



客车



Bus



轻型车



Light truck

Off Road / Marine Engine OEMs

船舶发电



Vessel Electricity



工程机械



Construction Machinery



农业机械



Agricultural Machinery





Market Statistics

China's GDP is targeted to grow approximately 5% for 2025. Beijing introduced a list of stimulus programs to revitalize its economy: PBOC cut reserve requirement ratios (RRR), reduced minimum down payments for home purchase, reduced taxes on property transactions, and eased downpayment requirements for second homes.

According to CAAM, 2H 2024 commercial vehicle unit sales*:

1. CV industry unit sales 1.0 million, a YoY decrease of 9.9%
2. Truck market – YoY change for HD (-12.3%), MD (+13.3%) and LD (-9.4%) segments
3. Bus market – YoY change for HD (-6.3%), MD (+15.3%) and LD (-15.6%) segments

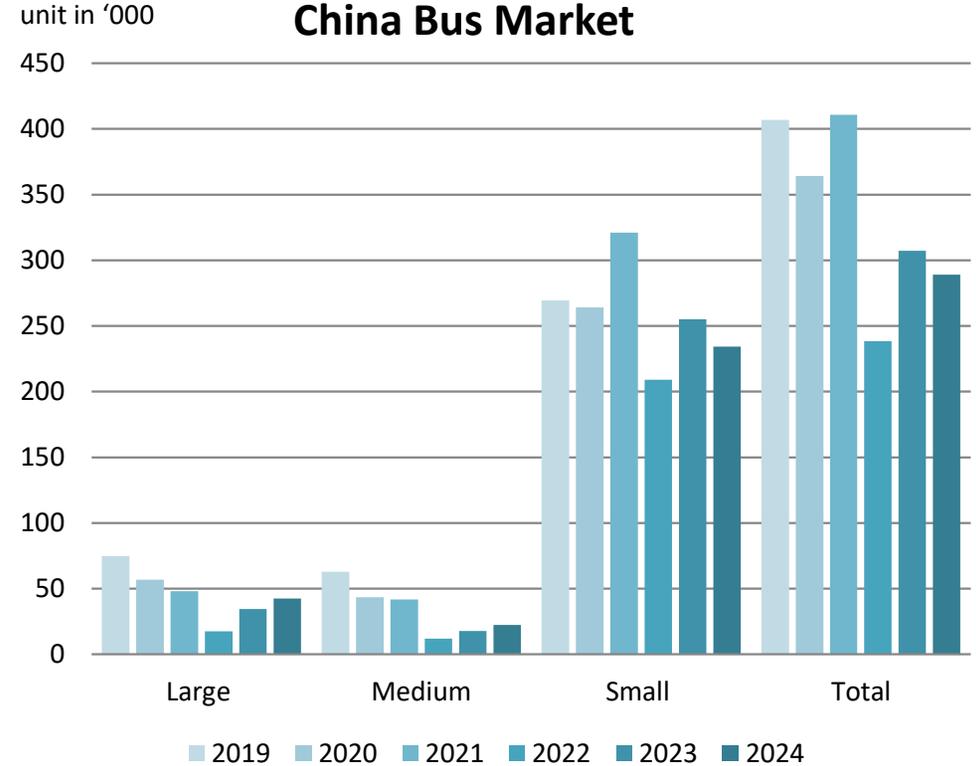
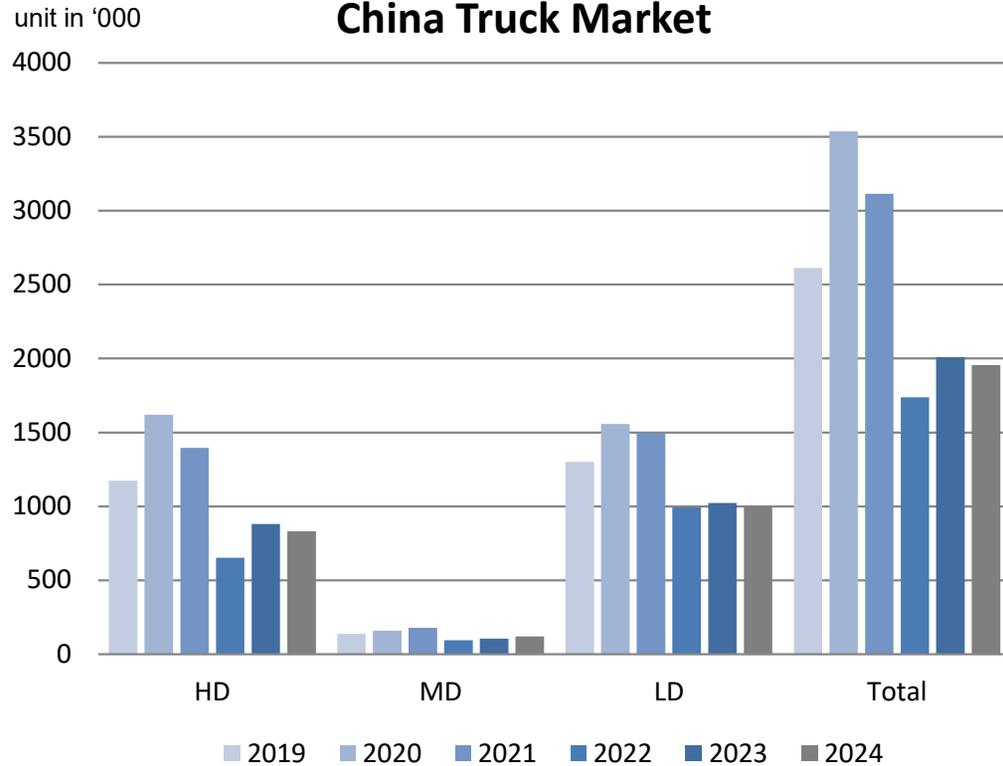
2024 Market review – On-road*

1. Higher MD truck unit sales compared to reduced HD and LD sales. Total sales of 2 million units, a YoY increase of 15%. HD segment was 43% of total truck sales.
2. Bus HD and MD unit sales increased by 95% and 50% from last year but LD bus sales declined. Total sales approximated 300,000 units, an increase of 28% YoY.

**excludes EV and gasoline*



Market Overview: Commercial Vehicles 2019-2024



Source: China Automotive Industry Newsletter
(Powered by Diesel and Others)

China Truck Market Drivers

- China's economic growth
- Stringent emission standards
- Anti-overloading policies
- Urbanization / logistics networks
- Vehicle replacement cycle

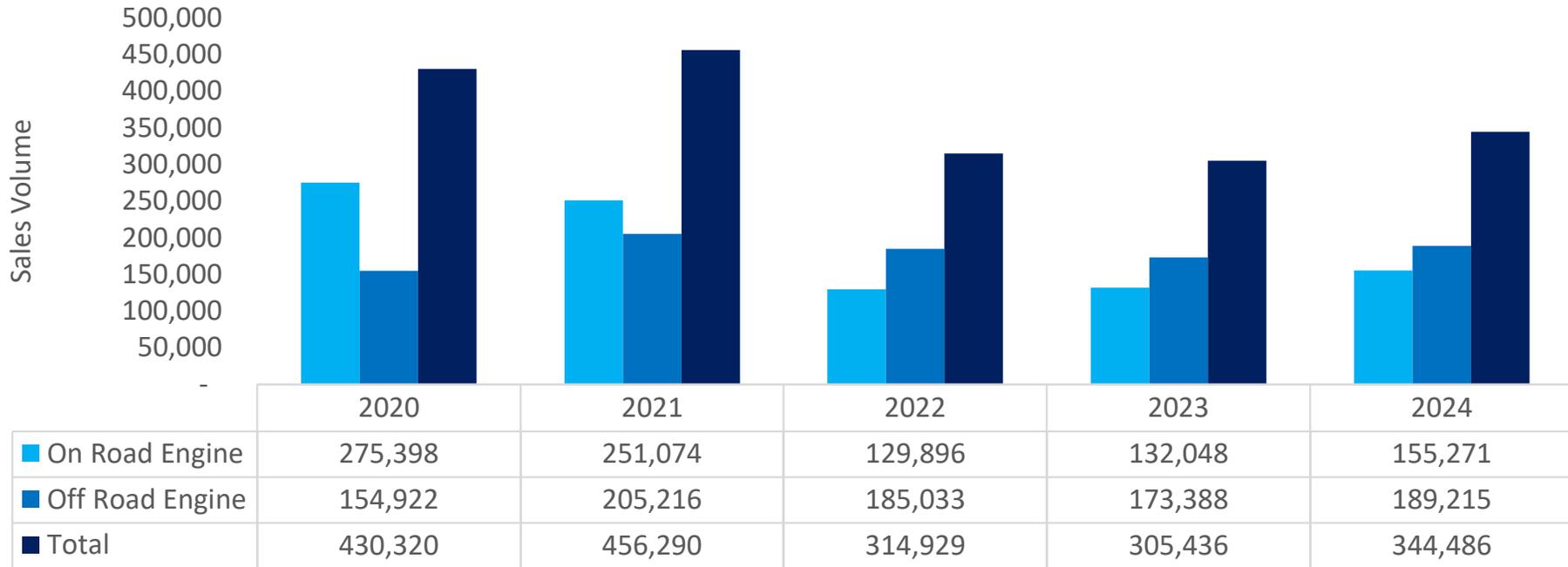
China Bus Market Drivers

- Rapid expansion into rural areas
- Tourism
- Continued urbanization
- Demand affected by EV and Hybrid systems

Note: 2021 and 2022 results impacted by COVID restrictions



China Yuchai Unit Sales (Excluding NEV): 2020-2024



Emission standard in China

- On-road National V emission standard was fully implemented from January 2018
- On-road National VI-a emission standard was fully implemented from July 2021
- On-road National VI-b emission standard was fully implemented in July 2023
- Off-road Tier 3 emission standards was fully implemented from December 2016
- Off-road machinery (below 560kW) Tier-4 emission standard implemented from December 2022

Note: 2021 and 2022 results impacted by COVID restrictions



Operations Strategy

1. Product Strategy

- **Ensure all products meet current stringent emission standards and be among the first engine manufacturers compliant with future emission standards**
- **Extend HD products into construction and mining applications**
- **Expand HHP products into marine and power generation markets**
- **Develop New Energy products for Hybrid Range-extenders, e-Axle Hybrid systems and Fuel cell power systems**
- **Develop Alternative Fuels for Low Carbon mission, including hydrogen, methanol and ammonia fuel combustion**
- **Extend product applications**

2. Business Strategy

- **Grow new markets with new products such as High Horsepower engines for marine and power generation segments, especially to meet data center demand growth**
- **Extend off-road engine platforms for industrial, construction and mining machines**
- **Ramp up New Energy product sales for both on- and off-road applications**
- **Nurture strategic alliances with OEM customers**
- **Grow international business**
- **Implement cost reductions through Supply Chain and Manufacturing Processes improvements**
- **Explore launching more production and assembly facilities to sustain future growth; new Thailand factory commenced operation in mid-2024**



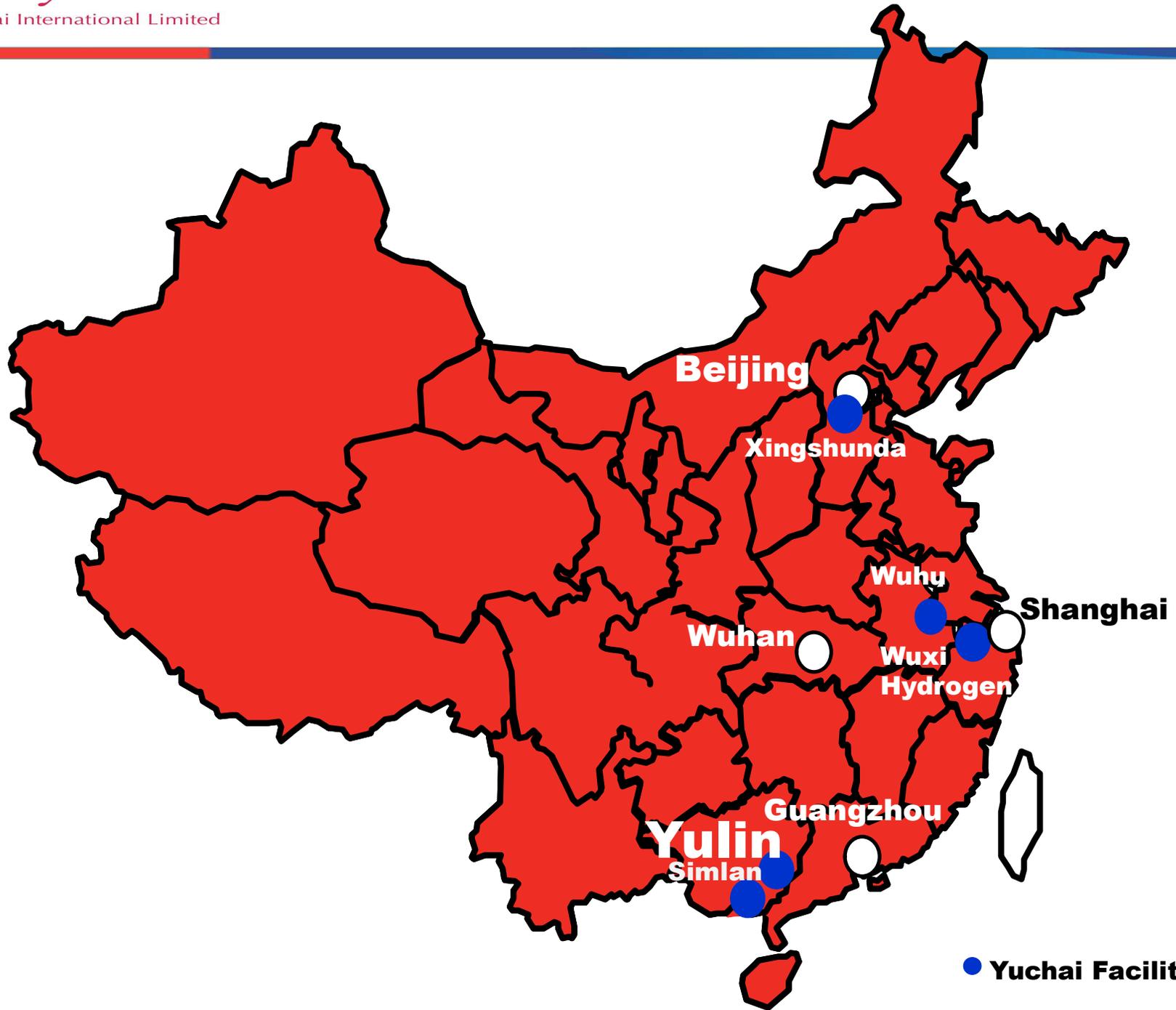
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Operational Overview





Manufacturing Capabilities: Engine Assembly Plants





Manufacturing Capabilities: Intelligent Digital Factory

Casting



Core making Robot

Machining



Machining centre from International and Domestic Suppliers

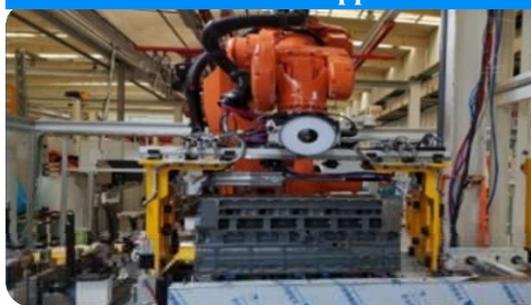
Assembly and Testing



Enclosed and constant temperature workshop



Molten Iron Pouring Robot



Logistics + auxiliary tools are fully automated



Robot + vision + full-axis automatic tooling



Automatic flashing and polishing of castings



Whole-process on-line detection + MES system



Intelligent data + SPS + on-line detection



Manufacturing Capabilities: Fully Automated Machining Centre



Fully Automatic Machining Centre for National VI Engine Components
Final Machining Processes



Manufacturing Capabilities: Foundry Centre



Automatic core making center

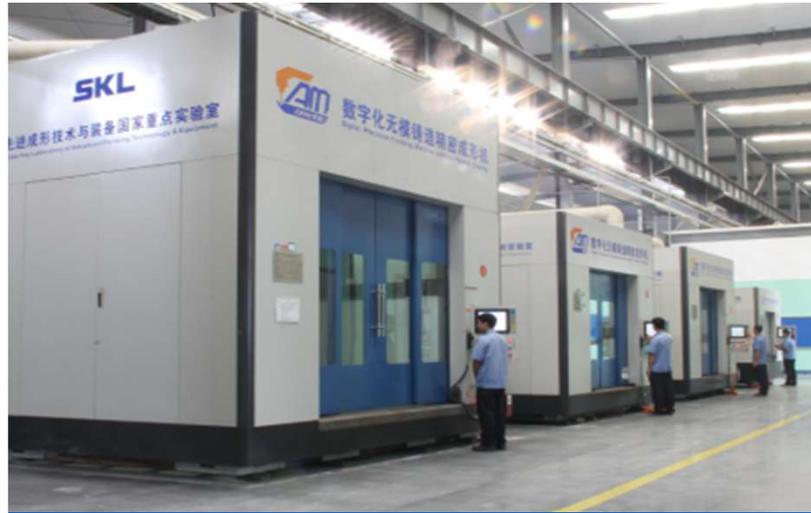


Automatic molten iron pouring



The world's first robot core setting

Manufacturing Capabilities: 3D Printing for Trial Production



New Product Trial Production Centre



Additive printing technology application



Subtractive printing technology application



Yulin Facility

Nat VI Engine Manufacturing Plants

Engine Assembly Plant



微正压、恒温、恒湿车间
Micro-positive pressure, constant temperature and humidity workshop.

Engine Component Machining Plants





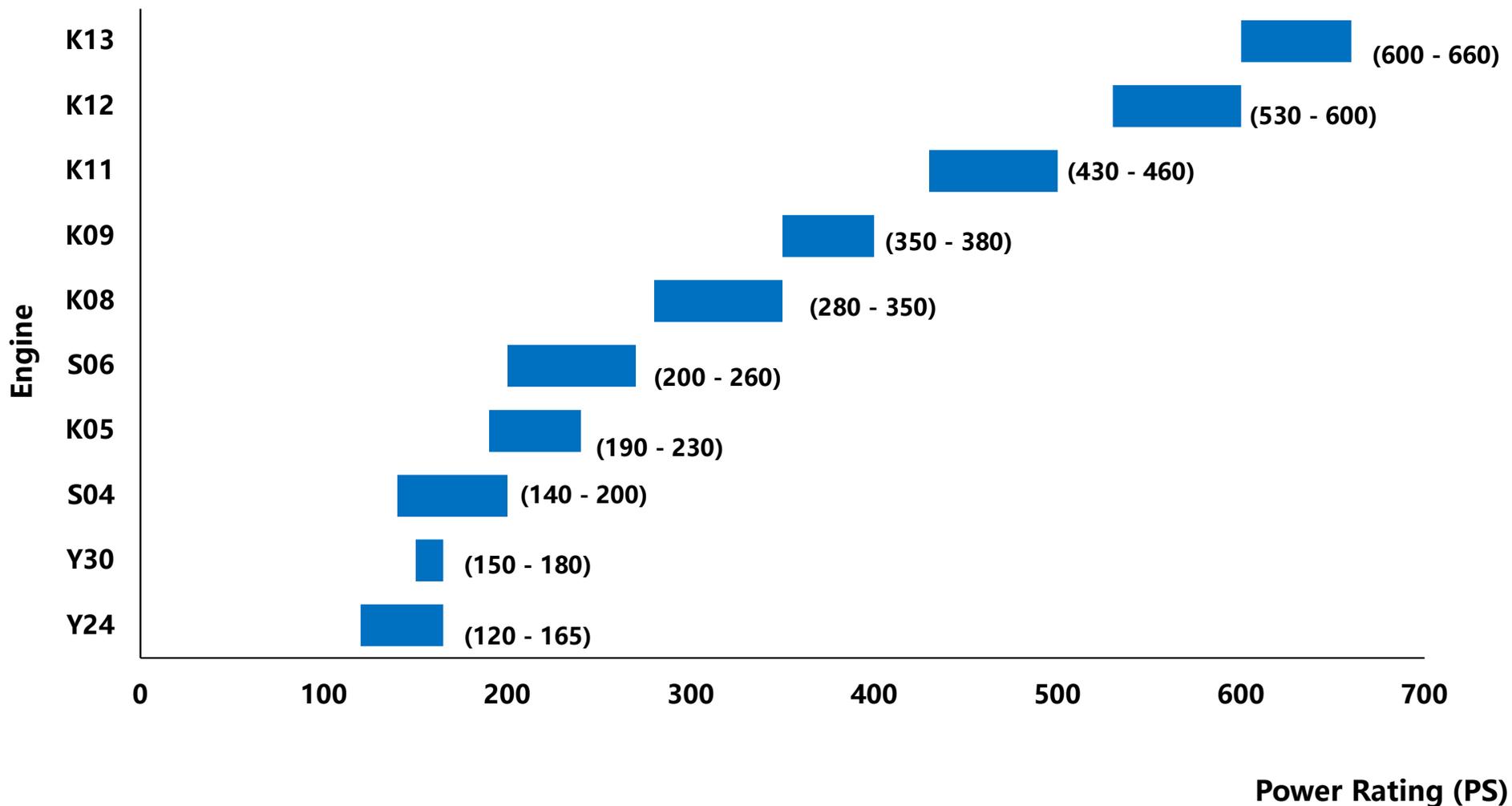
Our MTU JV partner

- ❑ A diesel engine manufacturer specializing in high-speed, large-rating diesel engines for power generation, oil & gas, railway, marine and mining, and data centers.
- ❑ MTU is a wholly owned subsidiary of Rolls-Royce Power Systems.

The Joint Venture

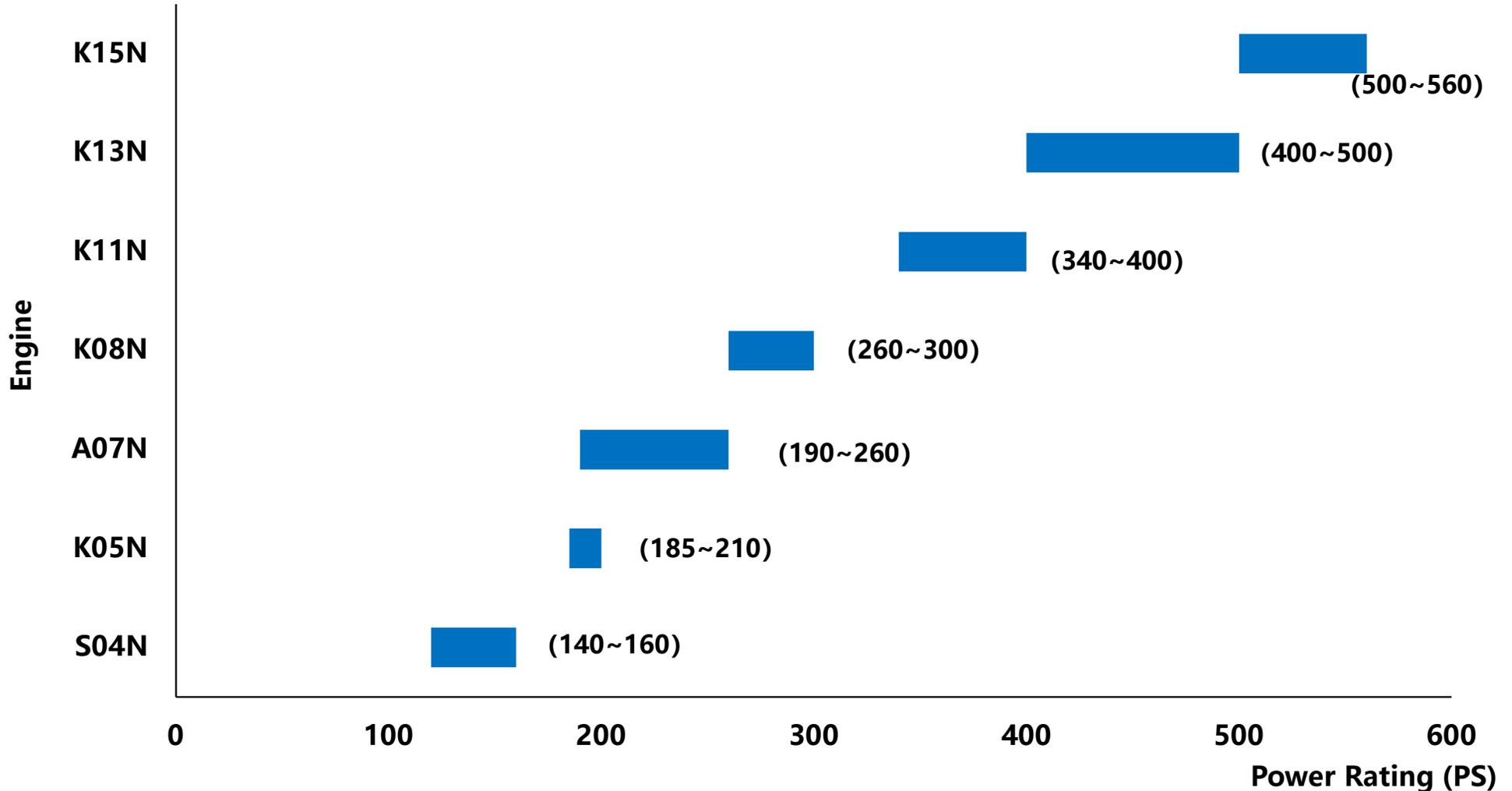
- ❑ The JV ownership is 50:50 between MTU and GYMCL with the main manufacturing facility located inside GYMCL's factory in Yulin, China.
- ❑ Operations have been profitable since 2019.
- ❑ Over 2,000 units of the flagship *MTU* Series 4000 high-horsepower diesel engines have been produced since 2017.
- ❑ In 2025, the JV commenced a project to add the *MTU* Series 2000 and the Yuchai-branded VC series diesel engines to expand sales. Capacity expansion is planned for new products in 2026.

Yuchai National VI-b Emission Standard Compliant Engines



- Full implementation of National VI-a emission standards starting from July 1, 2021
- Full implementation of National VI-b emission standards starting from July 1, 2023

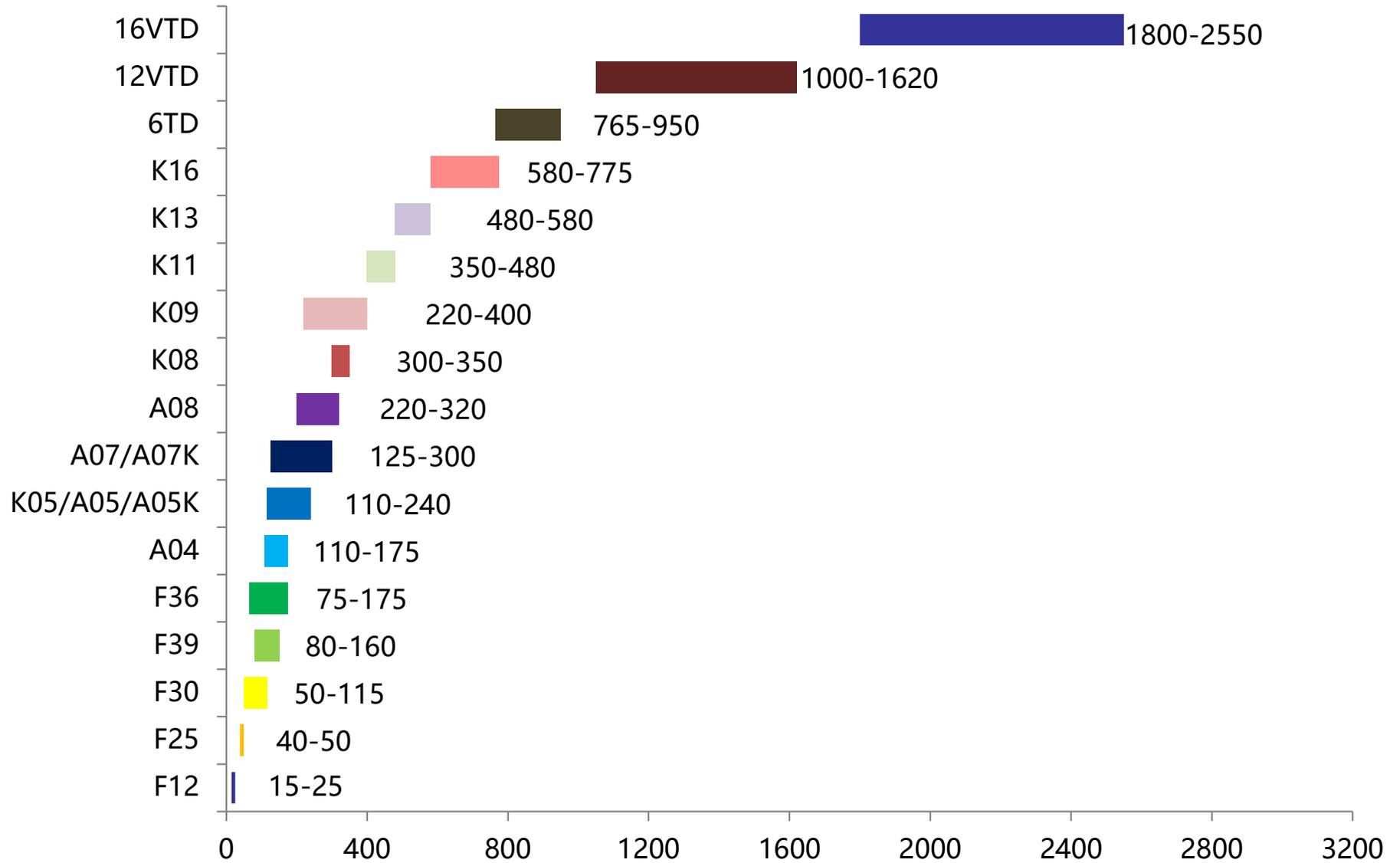
Yuchai National VI Emission Standard Compliant Gas Engines



- Implementation of National VI-a emission standards for gas engine starting from July 1, 2019
- Implementation of National VI-b emission standards for gas engine starting from Jan. 1, 2021

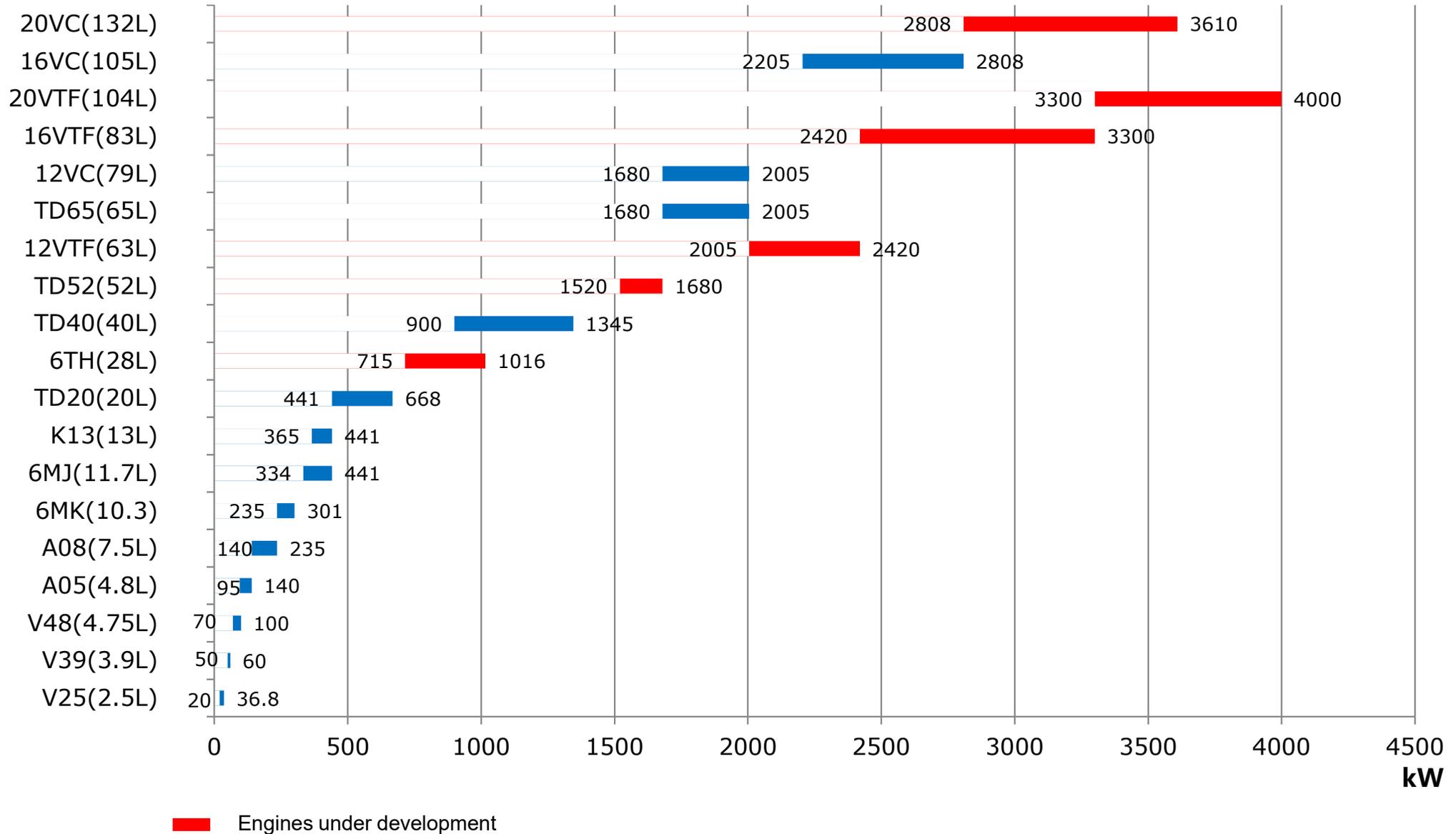
Yuchai Tier-4 Compliant Off-road Engines

20 engine series with Power range: 15~2550 hp





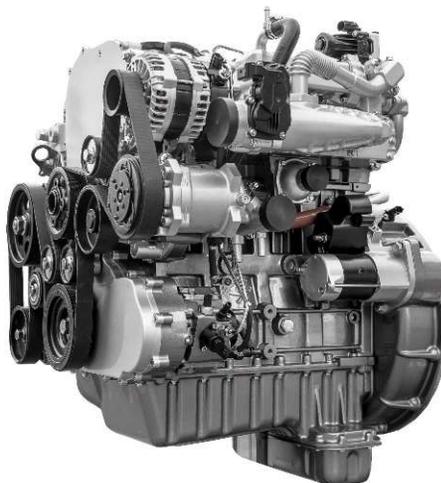
Marine and Power Generation Engine Platform (Tier 3 & 4)



LD and MD National VI Engines



Y24 – 120-165 PS



Y30 – 150-180 PS



S04 – 140-200 PS



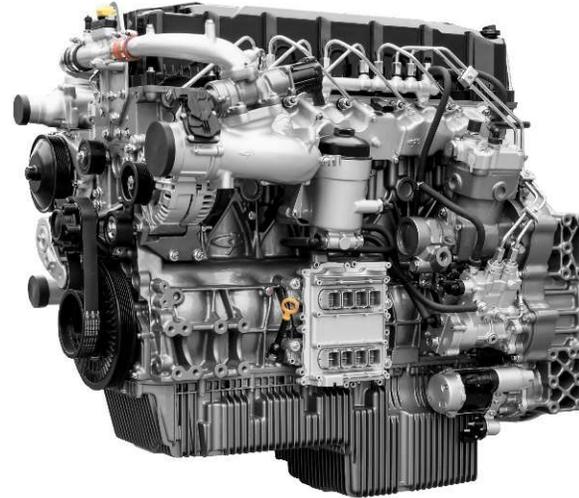
S06 – 200-260 PS



MD and HD National VI Engines



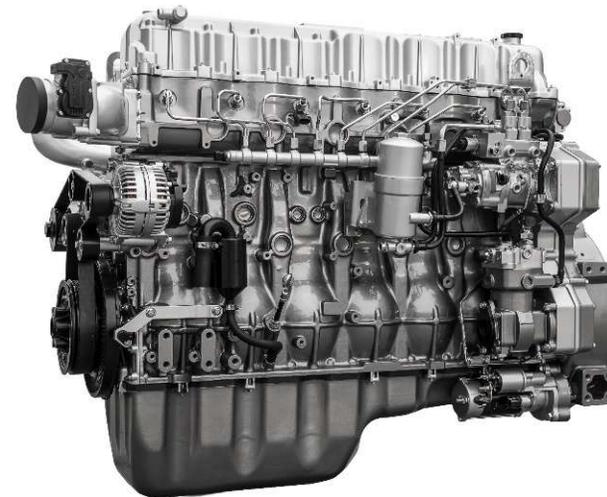
K05 – 190-230 PS



K08 – 260 - 300 PS



K09 – 360- 380 PS
K11 – 430-460 PS



K12 – 530-600 PS
K13 – 600-660 PS



YC12VTD



YC6C



YC12VC

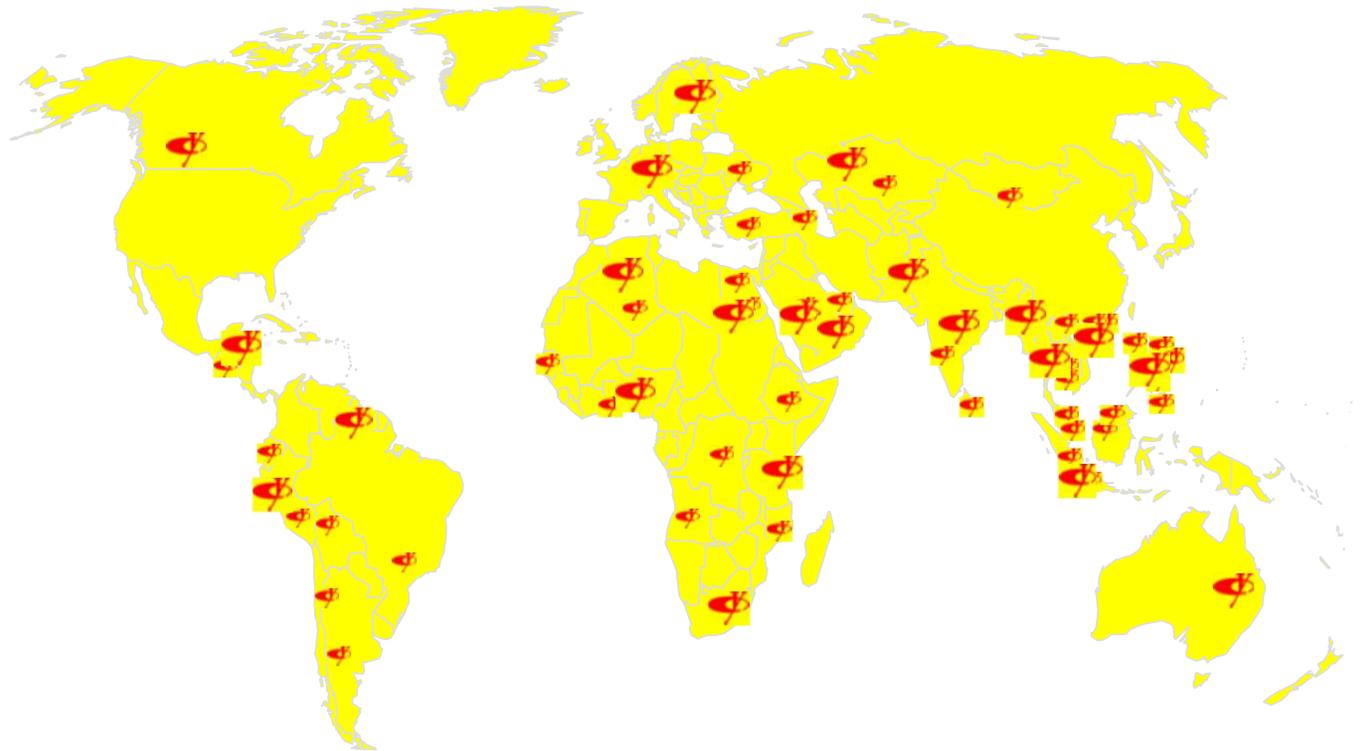


YC16VC

- YC6T/6TD - 6 cylinders, 16/19.5L, with 441-748 kW power rating
- YC6C – 6 cylinders, 40L, with 680-1221 kW power rating
- YC8CL – 8 cylinders, 72.8L , rated at 1029-1324 kW power rating
- YC12VTD – 12 cylinders, 39L, rated at 900-1520 kW power rating
- YC12VC – 12 cylinders, 80L, rated at 1380-2206 kW power rating
- YC16VTD - 16 cylinders, 52L, rated 1520 to 1985 kW power rating
- YC16VC - 16 cylinders, 108L, rated at 2005-3608 kW power rating

400 Distributors in **100** Countries

Support Network		
Marine Powergen	On- and off-road	
Indo-Malaysia	Vietnam	South America
Middle East	Philippine	Central North America
South Asia	Central South Asia	Northwest Africa
Euro Asia	Saudi Arabic	Northeast Africa
Central Asia	Central Asia	Southeast Africa
West Africa	Pakistan	West Africa
	Thailand	Euro-Asia
	West Asia	
	India	
	East Asia	
	Indonesia	



over 3,000 services stations in China.



Green Technologies

- **National Emission Standards for on-road applications**
 - Current National VI-b standard nationally mandated on July 1, 2023
 - Yuchai S04220-61 upgraded engine series became first Chinese engines certified for the UN R49.07 Euro VI E stage emission standard by TÜV Rheinland Greater China
 - Technologies for future National VII emission standards under development
- **National Tier-4 Emission Standards for off-road applications**
 - Yuchai has a comprehensive range of Tier-4 compliant diesel and gas engine models for light-, medium- and heavy-duty off-road applications including agricultural, industrial, construction and power generation markets
- **Hybrid and Range Extender Power Trains**
 - Yuchai Simlan's R&D to create new production capacity for new energy technologies
 - Introduced the new eCVT drivetrain on new generation hybrid systems
 - 65kW and 100kW Range Extender Power systems are installed in both truck and bus applications
 - A Yuchai Nat VI-b engine and a high-speed motor generator, 300kW range extender introduced for mining dump trucks
- **Natural Gas (CNG, LNG) and Alternative Fuel combustion**
 - CNG / LNG fuel systems available for truck and bus, marine and power generation applications
 - Alternative fuel development includes hydrogen, methanol and ammonia combustion
Introduced first hydrogen combustible engine K05H for commercial vehicles in 2021
 - New heavy-duty K15H hydrogen combustion engine started on-road vehicle trials in 2024



Cost & Technology Improvements

Lean Manufacturing

- Promote lean manufacturing across all machining and engine assembly plants
- Machining processes outsourced to reduce capital investment

Supply Chain Improvement

- Reduced number of suppliers through stringent vendor selection policy and establish long-term partnership program to achieve cost savings
- Improved component sourcing standards through total quality commitment program requiring stricter quality at component suppliers

Intelligent Manufacturing

- Implemented Intelligent Manufacturing SAP projects throughout all factories, foundry and testing centers
- Fully automated machining plants tailored for Nat VI-engine production
- 3D casting mould printing reduces development lead time
- SAP system implemented in finance, supply chain, logistics and R&D departments
- Remote engine monitoring through ECU data communication

V Configuration for HHP engines

- VTF series engine (in 12V/16V/20V configurations) with power range between 2,000kW - 4,000kW for marine and power generation applications
- Medium-speed engine development for power ratings up to 10MW



R&D Capability

- Self-established National Engineering Laboratory is an efficient, energy-saving and environmentally-friendly internal combustion engine testing laboratory in China, rated as a top tier laboratory in the Chinese diesel industry.
- Installation of 84 engine test benches and 16 parts & components test benches, comprising:

✓ Full Flow Sampling Emission Bench	✓ Plateau Simulation Bench
✓ Direct Sampling Dynamic Emission Bench	✓ Vehicle Test Bench
✓ Partial Flow Sampling Emission Bench	✓ Thermal Shock Test Bench
✓ Cold Start Bench	✓ Deep Thermal Shock Test Bench
✓ Semi-anechoic Room Test Bench	✓ PTO Bench
✓ Mobile Bench for Plateau Test	✓ Inclination Test Bench
- The measurement scope covers engines with displacement of 3~120L, and the overall R&D facilities reach the international advanced standard.
- New Energy/Low Carbon Development and Production facility including:

✓ High-Speed Motor Assembly and self-developed MCU/BCU controls
✓ Range Extender System Assembly up to 400 kW rating
✓ eCVT Hybrid System Assembly
✓ Fuel Cell System Assembly / Fuel Stack development – 90/120/150 kW rating
✓ PEM hydrogen production equipment for energy storage
✓ Hydrogen-combustion engines in performance testing



R&D capabilities

- ❑ Approximately 650 engineers including PhDs and Master Degree holders
- ❑ Over 3,000 patents have been registered as of 31 December 2024
- ❑ New Energy R&D and Production facilities were set up in Nanning R&D center

Powertrain innovations

- ❑ **Late 2018:** Model K08 engine was first domestic diesel engine to pass the National VI-b emission regulation
- ❑ Full suite China National VI (on-road) compliant engines are available; China Tier-4 (off-road) engines completed testing for commercial operation
- ❑ **2019:** Introduced NEV products – plug-in hybrid engines, EV powertrains, SG power generation powertrains, e-CVT power-split hybrid powertrains, Integrated electric drive axel powertrains and Fuel cell systems
- ❑ Hydrogen fuel cells and combustion engines continue further development
- ❑ Launched first QT700-10 turbine fan main shaft in 2024 to improve wind power generation

2 Developing Technologies



Fuel Cells

Mid-2021:

Commercially launched the 90kW fuel cell power system on buses

2023: Launched Nat VI, 2nd Generation engine platforms, delivered first batch of 90/120kW fuel cell systems to Beijing PT operator

Mid-2024: first 50 green energy buses equipped with Yuchai Xingshunda hydrogen fuel cells debuted in Beijing

Hydrogen Combustion Engines

Late-2021:

First ignition of the YCK05 Hydrogen Combustion engine

Mid-2022:

Launched heavy-duty hydrogen combustion engine



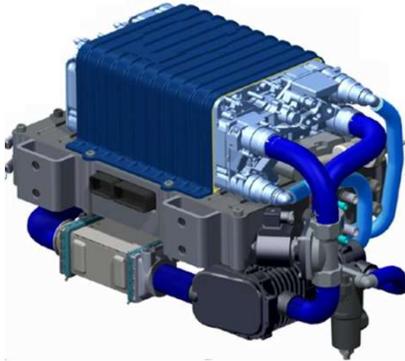
Yuchai New Energy Products

New energy power



High-speed electric motor:

- High rotation speed: more than 15000 rpm.
- High power density, and high torque density.



Fuel cell system

- High efficiency: maximum efficiency > 70%
- High integration, high power density, and ultra-low starting temperature.
- Wide application fields.



Integrated power generating engine power assembly system:

- The engine and motor are highly integrated, with compact structure.
- Uses flywheel integrated permanent magnet motor.



Integrated bridge system

- Highly integrated motor, motor controller, TCU, oil pump and sensor.
- Reduces the vehicle total weight.



New generation hybrid power system:

- High saving rate of fuel consumption: the oil saving rate is over 65%.
- High integration, electromechanical coupling, and modular design.



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**Business and Finance
Overview**

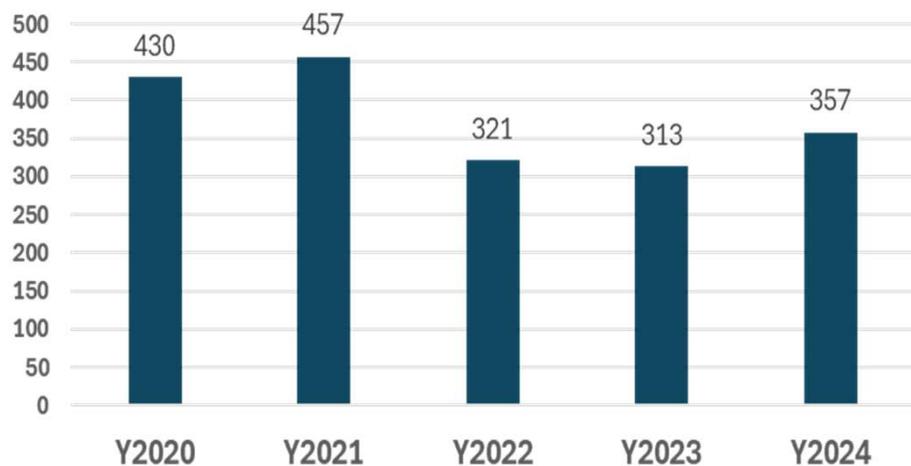
Financial Performance Review

	Y2020	Y2020	Y2022	Y2023	Y2024*
Units of engine sold (in thousands)	430	457	321	313	357
Revenue (in billion RMB)	20.6	21.3	16.0	18.0	19.1

* Unaudited

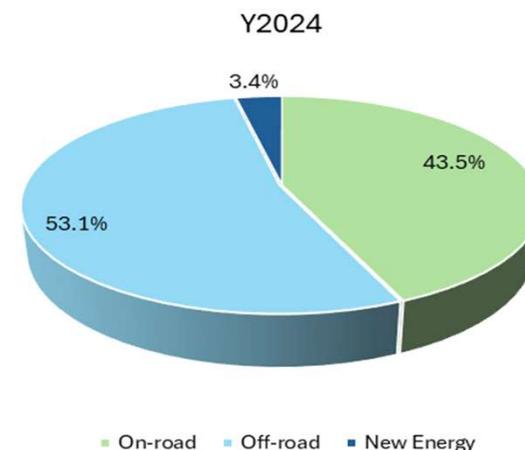
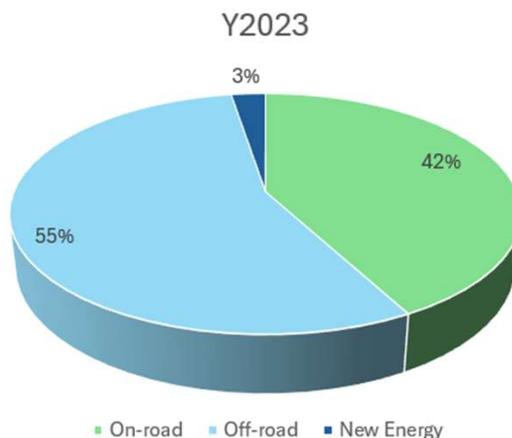
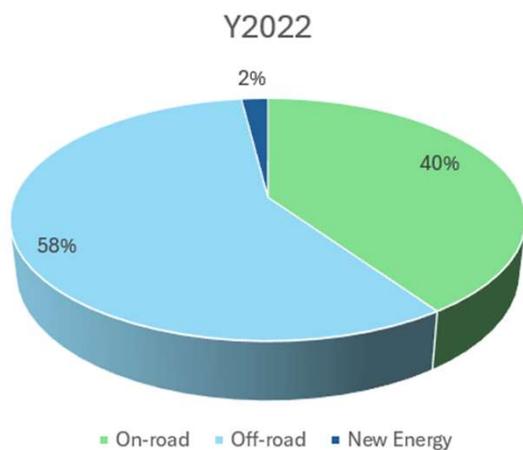
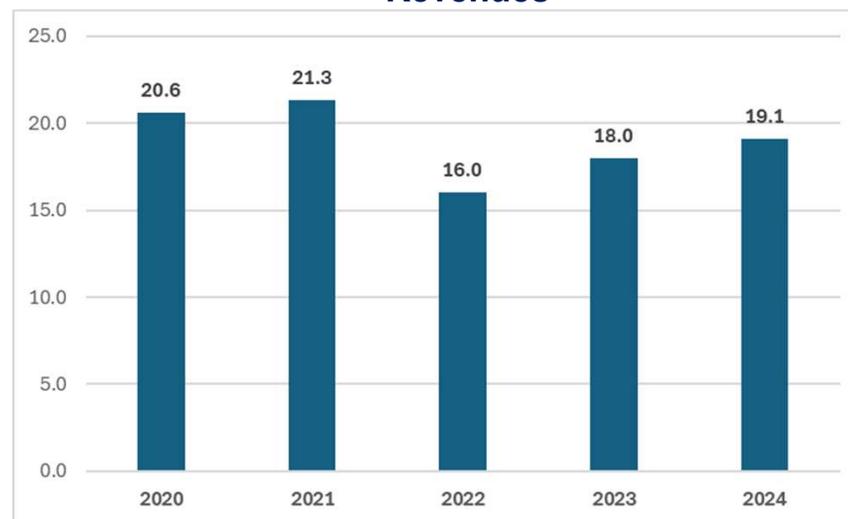
Units in '000

Engine Sales



RMB, billions

Revenues



■ On-road ■ Off-road ■ New Energy

■ On-road ■ Off-road ■ New Energy

■ On-road ■ Off-road ■ New Energy

Financial Performance Review

Profit Performance	Y2020	Y2021	Y2022	Y2023	Y2024*
Gross Profit %	15.5%	13.0%	13.6%	14.1%	14.7%
Operating Profit %	5.7%	3.1%	3.2%	3.4%	3.1%
EBITDA (RMB Billion)	1.5	1.0	1.0	1.2	1.3
Profit After Tax %	3.8%	1.9%	2.1%	2.3%	2.6%
Profit After Tax (RMB Billion)	0.8	0.4	0.3	0.4	0.5

- Profitability discipline to cope with the increased R&D spending year-on-year as well as heavily invested capital assets for product diversifications.

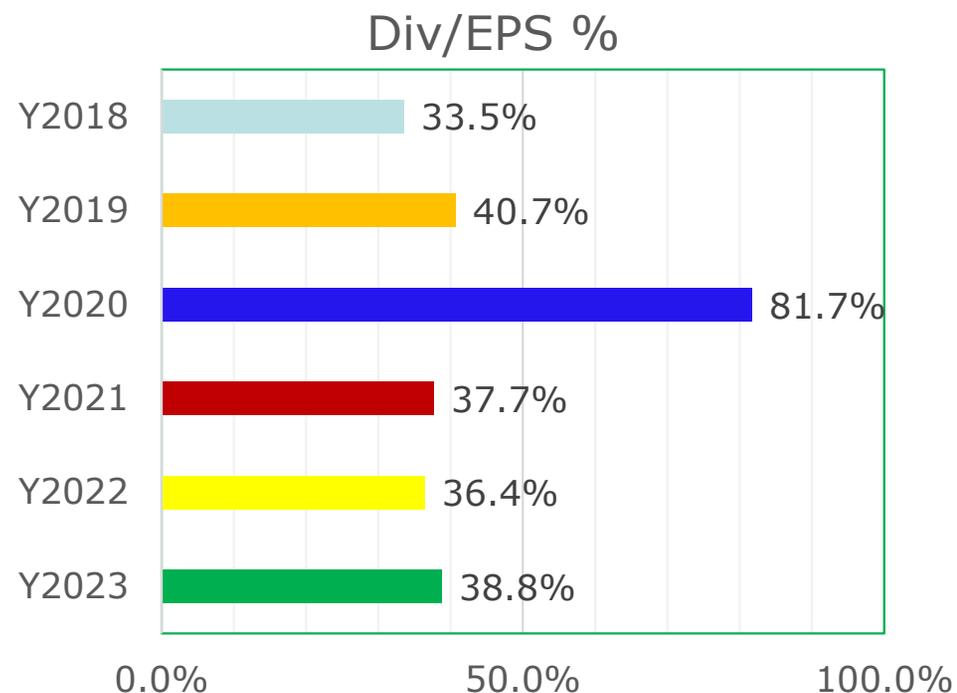
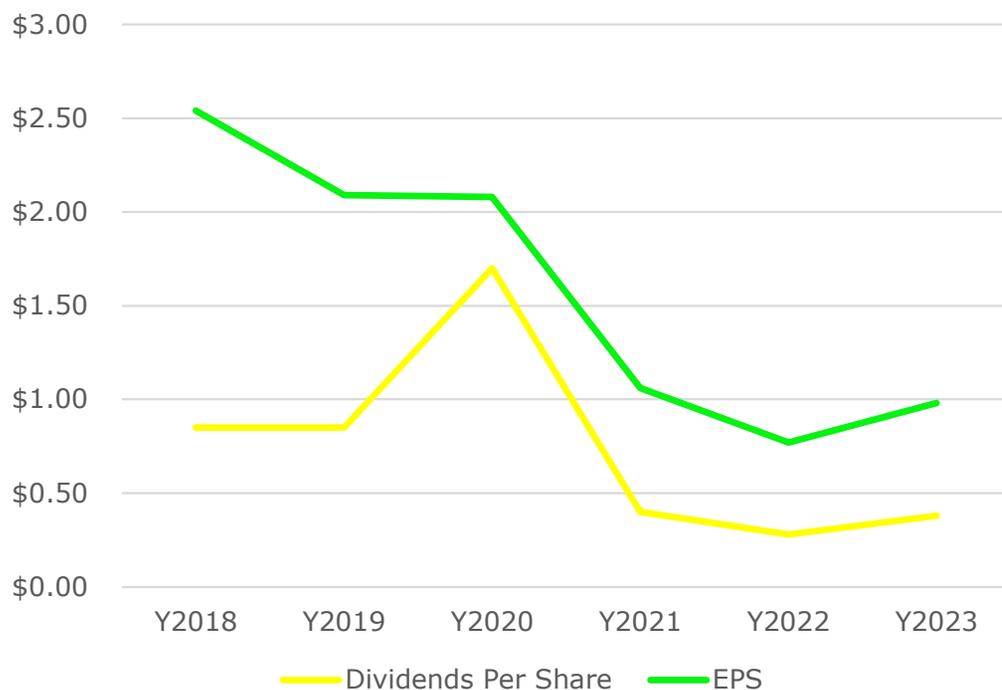
Key Balance Sheet Items	Y2020	Y2021	Y2022	Y2023	Y2024*
	RMB Billion				
Cash & Bank Balance	6.4	5.3	4.9	6.0	6.4
Total Assets	26.2	24.9	24.1	25.8	27.0
Total Loans	2.2	2.2	2.3	2.5	2.5
Equity for CYD	9.0	8.9	9.0	9.2	9.2
Shareholders Equity	11.8	11.6	11.8	12.2	12.3

- Balance Sheet remains healthy with sound Operating Cash Flow.

* Unaudited

Financial Performance Review

	Y2018	Y2019	Y2020	Y2021	Y2022	Y2023
Dividend per share (USD)	\$0.85	\$0.85	\$1.70	\$0.40	\$0.28	\$0.38
Earnings per share (USD)	\$2.54	\$2.09	\$2.08	\$1.06	\$0.77	\$0.98
Dividend / EPS, Ratio	33.5%	40.7%	81.7%	37.7%	36.4%	38.8%





Financial Performance Review

Key Financial Ratios	Y2020	Y2021	Y2022	Y2023	Y2024*
Debt/Equity Ratio	19.2%	19.3%	20.3%	21.3%	20.9%
Current Ratio	1.48	1.43	1.52	1.59	1.55

- Financial Ratios remain strong
- On June 7, 2024, equity incentive plans were approved for two Chinese subsidiaries, Yuchai and Guangxi Yuchai Marine and Genset Power Co., Ltd. ("MGP")
- A share buyback was conducted in 2024, under which a total of 3,339,968 shares were repurchased for a total of approximately US\$ 39.8 million. As of December 31, 2024, 37,518,322 shares of our common stock, and one special share, were issued and outstanding, in addition to 3,339,968 issued shares held as treasury shares.

* Unaudited

[NYSE: CYD]

Thank You

