J.P.Morgan

Asia Pacific Equity Research
25 May 2026

Silicon carbide sector

Updates on AI and auto applications - AI a positive factor but how meaningful?

Technology

Jimmy Huang AC
(886-2) 2725-9865
jimmy.huang@jpmorgan.com
J.P. Morgan Securities (Taiwan) Limited

Akinori Kanemoto
(81-3) 6736 8628
akinori.kanemoto@jpmorgan.com
JPMorgan Securities Japan Co., Ltd.

Gokul Hariharan
(852) 2800-8564
gokul.hariharan@jpmorgan.com
J.P. Morgan Securities (Asia Pacific) Limited/ J.P. Morgan Broking (Hong Kong) Limited

We provide our latest thoughts on the SiC sector, based on our industry research. We believe the data center power supply build and upcoming architecture migration from AC to HVDC (high voltage direct current) are bringing positive developments to the SiC sector. Although AI is generating strong sentiments for SiC-related stocks, we caution that expectations shall remain grounded on the contribution level. We think data centers could contribute a $400-500mn or fewer to the SiC device TAM in 2028 or outer years. As the SiC device TAM was already built up by EV and could reach $4.0-4.5bn in 2026, we think data center contribution could rise from current LSD to MSD to HSD within two to three years. AI will be a critical driver for the SiC sector, but its contribution level to the SiC device TAM could fall short of the bullish camp's expectations of 20-30%, in our view.

- **Data center SiC MOS - long lead time and high price.** Our industry research indicates that the lead time for AI SiC MOS has increased to 52 weeks. Additionally, prices for AI SiC MOS (high spec ones) are now at least twice as high as those for auto inverter SiC MOS, when comparing identical die size and Rds(On) specs. This encouraging dynamic is driven by exceptionally strong and urgent orders from AI customers, while qualified production capacity is temporarily limited to meet the surge in demand. Looking ahead, we think price reductions for AI SiC MOS could be much smaller than in the auto market, despite more qualified capacity.
- **Data centers potentially $400-500mn or fewer to the SiC device TAM in 2028 or outer years.** The push towards higher rack power densities is forcing upgrades of data center power architecture from AC to HVDC, and SiC enables more efficient, compact conversion at both the infra level (UPS and SST) and the server level (PSU). Our industry research suggests 1MW HVDC data center power build could have SiC content value of $5.0-6.0k or slightly higher, based on its power module topology and device price. J.P. Morgan teams have forecast an 80GW AI data center power new installment in 2028, implying a $400-480mn contribution to the SiC device TAM, if HVDC penetration is 100%. Yet, the data center SiC TAM shall be smaller than this range, considering the mix between AC and HVDC.
- **SiC device TAM already built up by EV; data center contribution potentially rising to MSD to HSD in 2028 or outer years.** Although AI is generating strong sentiment for SiC-related stocks, we caution that expectations should remain grounded on the contribution level. The Yole Group forecasts (link) that the global SiC device TAM will grow from ~$3.7bn in 2025 to ~$4.6bn in 2026, up 25% YoY due mainly to the accelerating 800V migration in EVs. In our view, SiC is already benefiting significantly from EV adoption, and we think the global SiC device TAM could be $4.0-4.5bn in 2026. Data center contribution to the SiC device TAM could grow from currently low single digits to mid-to-high-single digits two to three years out. We believe data centers will be a very important driver for the SiC sector, but we suspect its contribution level could fall short of the bullish camp's

See page 6 for analyst certification and important disclosures, including non-US analyst disclosures.

expectations of 20-30% (of the TAM).

- **SiC substrate prices - 6” stabilized but 8” dropping.** Prices for 6” SiC substrates have stabilized at ~Rmb1.5k since early 2026, vs Rmb3.0k in early 2025 and Rmb4.5k in early 2024. Some suppliers have shut down capacity given prices are below their production cash cost (Rmb1.5-2.0k, depending on scale). China’s top 2 SiC substrate suppliers are operating at nearly full utilization rates for 6”, but industry over-capacity prevents any meaningful price recovery. Prices for 8” SiC substrates have been in constant decline: ~Rmb7.0k in early 2025, Rmb5.5-6.0k in mid 2025, ~Rmb4.5k in early 2026 and ~Rmb4.0k in mid 2026. We expect 8” SiC substrate prices to further decline to Rmb 3.0-4.0k at end 2026 and Rmb2.5-3.5k in 2027. Customers request the pricing gap between 6” and 8” SiC substrates to be below 1.7x, based on wafer area difference. Even considering the production efficiency gain from 6” to 8”, the price gap should be capped at 2.0x. Key triggers for the 8” price decline include improvements in yield and efficiency, as well as more effective supply from Chinese suppliers. The above prices are based on our industry research and refer to those offered by Chinese suppliers to large customers. A leading SiC substrate supplier talked about raising 8” prices. We believe it will be quite challenging to raise prices to major, important customers, if a supplier aims for market share. Our industry studies over the past four years and most recent industry discussions do not support the price hike expectation.
- **Auto inverter SiC MOS - ongoing price declines but increasing lead times.** Prices for auto inverter SiC MOS also continue to decline rapidly in the China market. Prices from international IDMs could fall from $6.0-6.5 in 2024 and $5.0-5.5 in 2025 to $3.0-3.5 in 2026 and potentially $2.5 in 2027. Chinese suppliers could quote 15-30% lower, depending on product competency. On the positive side, lead time for auto SiC MOS has increased from 26 weeks (the basic manufacturing time) to 39 weeks, with some specs lengthening to 52 weeks, given the AI crowd-out effect. Pricing negotiation frequency has been reduced from quarterly to semi-annual for some cases, amid the lead time increase. However, whether prices for auto SiC MOS could stablize into 2027 is not clear, as it depends on supply-side competition. If more Chinese SiC MOS suppliers are qualified for auto inverters, prices for SiC MOS will remain under pressure into 2027.
- **Fast-rising SiC penetration in China EVs.** Ongoing SiC price declines drive SiC adoption to EV models priced ~Rmb150k. We think China’s SiC EV shipments (excl. Tesla) reached 2.5mn units in 2025 and could rise to 4.0mn units or more in 2026, up 60% YoY or more. This would lift the SiC penetration rate from the mid-teens in 2025 to the low twenties in 2026. Additionally, SiC product iterations are improving on-resistance (Rds(On)), enabling a reduction in the number of SiC MOS dies per module in some EV models (i.e., 1200V modules from 48 to 42/36 dies, and 750V modules from 36 to 30/24 dies). Net-net, we believe the auto SiC device TAM will grow moderately in 2026.
- **Implications for A-share stocks.** United Nova (UNT) is the leading Chinese supplier for SiC MOS, and it has mentioned the potential to increase SiC MOS (chip and module) revenue from Rmb1.5bn in 2025 to Rmb3.0bn in 2026 (implying a revenue mix of 18% and 28% in 2025 and 26) (JPM note). We believe UNT remains a key beneficiary of strong SiC MOS demand. UNT has sampled its 8” SiC MOS to an international AI server custoemr for qualification, which we believe is a CSP ASIC company. If UNT can pass qualification, we believe it would help ease the current supply tightness as UNT has mass production capabilities and UNT can ramp up more 8” SiC capacity in a timely manner. SICC is the most leading Chinese supplier for 6” and 8” SiC substrates and could benefit from increasing SiC adoption in datacenters and potentially advanced packaging in the mid to long term. SICC is ramping up its 8” SiC substrates meaningfully this year (i.e. potentially doubling YoY). However, we see continued pricing pressure for 8” SiC substrates through 2026 and we remain cautious on SICC stock, as we sense certain wrong expectations on SiC substrate pricing outlook.
- **Implications for Rohm (covered by Akinori Kanemoto).** Against FY25 revenue of just

Jimmy Huang AC
(886-2) 2725-9865
jimmy.huang@jpmorgan.com

over JPY 40bn (JPM estimate; +14% YoY, with SiC devices/modules +41% YoY), the company is planning FY26 revenue of just under JPY 55bn (JPM estimate; +30% YoY, with devices/modules +55% YoY). In FY26, management plans to offset the loss of its external 6-inch wafer sales business with growth in device/module revenue. For xEV inverter applications, China accounts for more than half of FY25 sales, but toward FY28 the China mix is expected to decline while Japan/Korea/Europe/US increase. SiC MOSFETs for AI servers have already ramped in FY25, and the company plans to lift the revenue mix to 10% in FY26. On the technology front, mass production of 8-inch wafers is scheduled to start in FY26 - initially deployed in its 4th-generation platform, followed by the rollout of 5th-generation MOS to improve yields and productivity. Including the impact of the impairment taken at FY25 year-end, the company is targeting a return to profitability by FY28.

Jimmy Huang [AC]
(886-2) 2725-9865
jimmy.huang@jpmorgan.com

Bookshelf – (China) SiC sector reports

- Sep 2025 - Silicon Carbide Sector - Our takes on CoWoS SiC carrier / thermal interface material; GlobalWafers at SEMICON Taiwan - Report link
- Sep 2025 - Silicon Carbide Sector - News reports on CoWoS SiC interposer; we view this as only a concept and R&D direction, without further visibility - Report link
- May 2025 - China Silicon Carbide Sector - Renesas abandons plan to produce SiC chips, with Chinese overproduction being one key reason - Report link
- Apr 2025 - China Silicon Carbide Sector - Key takeaways from our SiC substrate expert call; solid SiC EV model pipeline at the Shanghai Auto Show - Report link
- Apr 2025- China Silicon Carbide Sector - Increased competition; Updating views on substrates, device, equipment, applications and stocks - Report link
- Dec 2024 - China Tech - Geopolitical dynamics on mature node semis: US Section 301 investigation and international IDMs' local-for-local strategies - Report link
- Dec 2024 - China Silicon Carbide Sector - 2024 recap: A tough year for 6" substrates. 2025 outlook: Industry focusing on ramp of 8" substrates & auto SiC MOS; robust growth for China SiC EV - Report link
- Nov 2024 - China Silicon Carbide Sector - Key takeaways from Axcelis 3Q24 earnings call; China SiC device capacity build dynamics - Report link
- Nov 2024 - Silicon Carbide Sector - Recent industry dynamics on SiC/Si hybrid modules for EV inverters - Report link
- Sept 2024 - Silicon Carbide Sector - 8" SiC partnership of Episil Tech and VIS - Report link
- Aug 2024 - China Silicon Carbide Sector - Read-through from Silan Micro's 1H24 print and earnings call - Report link
- Jul 2024 - China Silicon Carbide Sector - China auto market landscape and substrate/device 8" transition as focal points; better demand in 2H24 - Report link
- Jun 2024 - China Silicon Carbide Sector - China auto SiC MOS: Hyper demand growth, rising competition and green shoots of localization - Report link
- Jun 2024 - United Nova - Chinese leader in auto SiC MOS; Solid revenue growth but lingering profitability pressure; Initiate at Neutral - Report link
- Mar 2024 - China Silicon Carbide Sector - China substrate competitive landscape updates from TanKeBlue and implications for SICC - Report link
- Feb 2024 - China Silicon Carbide Sector - Post-CNY checks: 'Materials' a back-end loaded 2024 and initial sign of over-supply; implications for Device Equipment - Report link
- Jan 2024 - China Silicon Carbide Sector - Chinese SiC epi maker EpiWorld IPO prospectus; implications for SICC and SiC industry - Report link
- Nov 2023 - China Silicon Carbide Sector - On-the-ground checks and key themes for 2024 - Report link
- Aug 2023 - China Silicon Carbide Sector - Implications from three global SiC power device makers' earnings calls - Report link
- Jun 2023 - Silicon Carbide Sector - Our views on Chinese progress in substrates, device and equipment; OW SICC and Rohm - Report link

Jimmy Huang AC
(886-2) 2725-9865
jimmy.huang@jpmorgan.com

- Apr 2023 - Japan Electronic Components - Power semiconductor industry and position of Japanese manufacturers - Report link
- Apr 2023 - Silicon Carbide Sector - Asian SiC foundries riding on strong market demand and localization benefits; HANA & Episil Tech - Report link
- Feb 2023 - First Principles - Silicon Carbide: Key growth driver for European semi device makers - Report link
- Feb 2023 - Networking & Hardware: The Silicon Carbide (SiC) Cheat Sheet - Report link
- Feb 2023 - Silicon Carbide Deep Dive: Substrate and Asia focus; positive about the SiC sector and OW WOLF, COHR, Rohm and SICC - Report link
- Feb 2023 - SICC - Initiate pure China SiC substrate play at OW, on TAM expansion, localization and power SiC ramp - Report link

Jimmy Huang [AC]
(886-2) 2725-9865
jimmy.huang@jpmorgan.com

Companies Discussed in This Report (all prices in this report as of market close on 25 May 2026, unless otherwise indicated)
Rohm (6963)(6963.T/¥5,030/OW), United Nova - A(688469.SS/Rmb8.25/N)

Analyst Certification: The Research Analyst(s) denoted by an "AC" on the cover of this report certifies (or, where multiple Research Analysts are primarily responsible for this report, the Research Analyst denoted by an "AC" on the cover or within the document individually certifies, with respect to each security or issuer that the Research Analyst covers in this research) that: (1) all of the views expressed in this report accurately reflect the Research Analyst's personal views about any and all of the subject securities or issuers; and (2) no part of any of the Research Analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the Research Analyst(s) in this report. For all Korea-based Research Analysts listed on the front cover, if applicable, they also certify, as per KOFIA requirements, that the Research Analyst's analysis was made in good faith and that the views reflect the Research Analyst's own opinion, without undue influence or intervention.

All authors named within this report are Research Analysts who produce independent research unless otherwise specified. In Europe, Sector Specialists (Sales and Trading) may be shown on this report as contacts but are not authors of the report or part of the Research Department.

Important Disclosures

Company-Specific Disclosures: J.P. Morgan
should be aware that the firm may have a con
as only a single factor in making their invest
applicable), are available for compendium re
request.

Market Maker/ Liquidity Provider: J.P. Morgan is a market maker and/or liquidity provider in the financial instruments of/relate
(6963), United Nova - A or related entities.

Client: J.P. Morgan currently has, or had within the past 12 months, the following entity(ies) as clients: R

Debt Position: J.P. Morgan may hold a pos

Client/Non-Securities-Related: J.P. Morgan currently has, or had within the pas
services provided were non-securities-related: Rohm (6963) or related entities.

Potential Investment Banking Compensation: J.P. Morgan expect
services in the next three months from Rohm (6963) or related entities

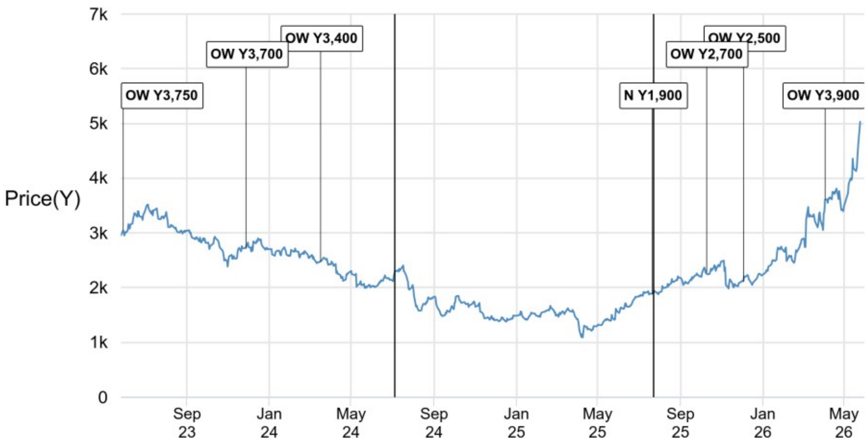
Non-Investment Banking Compensation Received: J.
other than investment banking from Rohm (6963) or relat

Client/Non-Investment Banking, Securities-Related: J.P. Morgan currently has, or had wit
as clients, and the services provided were non-investment-banking, securities-related: Rohm (6

Beneficial Ownership (1% or more): J.P. Morgan beneficially owns 1% or more of a class of common equity securit
related entities.

https://www.jpmm.com/research

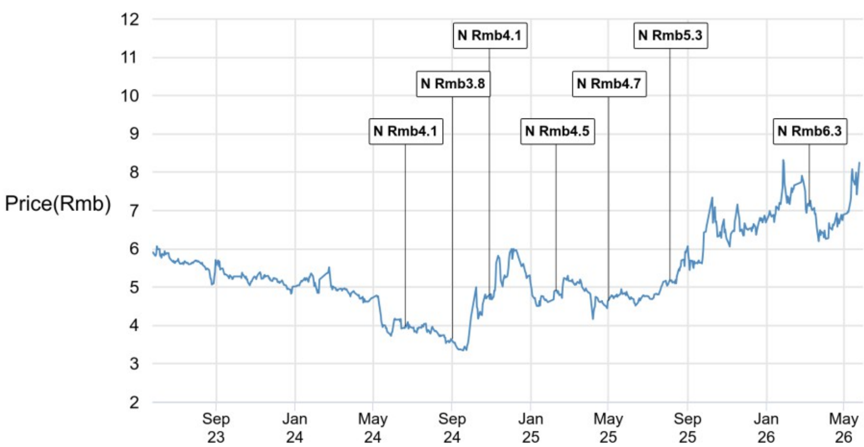
Rohm (6963) (6963.T, 6963 JP) Price Chart



Source: Bloomberg Finance L.P. and J.P. Morgan; price data adjusted for stock splits and dividends.
Initiated coverage Aug 12, 2001. All share prices are as of market close on the previous business day.
Break in coverage Jul 04, 2024 - Jul 22, 2025.

Date	Rating	Price (Y)	Price Target (Y)
30-May-23	OW	3042	3,750
28-Nov-23	OW	2725	3,700
18-Mar-24	OW	2472	3,400
22-Jul-25	N	1888	1,900
10-Oct-25	OW	2294	2,700
04-Dec-25	OW	2116	2,500
04-Apr-26	OW	3608	3,900

United Nova - A (688469.SS, 688469 CH) Price Chart



Source: Bloomberg Finance L.P. and J.P. Morgan; price data adjusted for stock splits and dividends.
Initiated coverage Jun 21, 2024. All share prices are as of market close on the previous business day.

Date	Rating	Price (Rmb)	Price Target (Rmb)
21-Jun-24	N	3.98	4.1
02-Sep-24	N	3.65	3.8
29-Oct-24	N	4.79	4.1
10-Feb-25	N	4.91	4.5
02-May-25	N	4.64	4.7
05-Aug-25	N	5.18	5.3
09-Mar-26	N	7.18	6.3

The chart(s) show J.P. Morgan's continuing coverage of the stocks; the current analysts may or may not have covered it over the entire period.
J.P. Morgan ratings or designations: OW = Overweight, N= Neutral, UW = Underweight, NR = Not Rated

Explanation of Equity Research Ratings, Designations and Analyst(s) Coverage Universe:
J.P. Morgan uses the following rating system: Overweight (over the duration of the price target indicated in this report, we expect this stock will outperform the average total return of the stocks in the Research Analyst's, or the Research Analyst's team's, coverage universe); Neutral (over the duration of the price target indicated in this report, we expect this stock will perform in line with the average total return of the stocks in the Research Analyst's, or the Research Analyst's team's, coverage universe); and Underweight (over the duration of the price target indicated in this report, we expect this stock will underperform the average total return of the stocks in the Research Analyst's, or the Research Analyst's team's, coverage universe. NR is Not Rated. In this case, J.P. Morgan has removed the rating and, if applicable, the price target, for this stock because of either a lack of a sufficient fundamental basis or for legal, regulatory or policy reasons. The previous rating and, if applicable, the price target, no longer should be relied upon. An NR designation is not a recommendation or a rating. Some stocks under coverage have a rating but no price target; in these cases, we expect the stock will outperform/perform in line/underperform the average total return of the stocks in the Research Analyst's, or the Research Analyst's team's, coverage universe of the relevant duration of the region. In our Asia (ex-Australia and ex-India) and U.K. small- and mid-cap Equity Research, each stock's expected total return is compared to the expected total return of a benchmark country market index, not to those Research Analysts' coverage universe. If it does not appear in the Important Disclosures section of this report, the certifying Research Analyst's coverage universe can be found on J.P. Morgan's Research website, https://www.jpmorganmarkets.com.

Coverage Universe: Huang, Jimmy : ACM Research (ACMR), ACM Research (Shanghai) (688082.SS), All Ring Tech (6187.TW), GlobalWafers Co., Ltd (6488.TWO), Grand Process Technology (3131.TW), Hon. Precision (7769.TW), Macronix (2337.TW), NCE Power - A (605111.SS), SICC - A (688234.SS), Scientech (3583.TW), StarPower Semiconductor - A (603290.SS), United Nova - A (688469.SS), Winbond

(2344.TW)

J.P. Morgan Equity Research Ratings Distribution, as of April 04, 2026

	Overweight (buy)	Neutral (hold)	Underweight (sell)
J.P. Morgan Global Equity Research Coverage*	51%	37%	12%
IB clients**	83%	79%	74%
JPMS Equity Research Coverage*	49%	39%	13%
IB clients**	94%	93%	85%

***Please note that the percentages may not add to 100% because of rounding.**
****Percentage of subject companies within each of the "buy," "hold" and "sell" categories for which J.P. Morgan has provided investment banking services within the previous 12 months.**
For purposes of FINRA ratings distribution rules only, our Overweight rating falls into a buy rating category; our Neutral rating falls into a hold rating category; and our Underweight rating falls into a sell rating category. Please note that stocks with an NR designation are not included in the table above. This information is current as of the end of the most recent calendar quarter.

Equity Valuation and Risks: For valuation methodology and risks associated with covered companies or price targets for covered companies, please see the most recent company-specific research report at http://www.jpmorganmarkets.com, contact the primary analyst or your J.P. Morgan representative, or email research.disclosure.inquiries@jpmorgan.com. For material information about the proprietary models used, please see the Summary of Financials in company-specific research reports and the Company Tearsheets, which are available to download on the company pages of our client website, http://www.jpmorganmarkets.com. This report also sets out within it the material underlying assumptions used.

History of Investment Recommendations:
A history of J.P. Morgan investment recommendations disseminated during the preceding 12 months can be accessed on the Research & Commentary page of http://www.jpmorganmarkets.com where you can also search by analyst name, sector or financial instrument.

Analysts' Compensation: The research analysts responsible for the preparation of this report receive compensation based upon various factors, including the quality and accuracy of research, client feedback, competitive factors, and overall firm revenues.

Registration of non-US Analysts: Unless otherwise noted, the non-US analysts listed on the front of this report are employees of non-US affiliates of J.P. Morgan Securities LLC, may not be registered as research analysts under FINRA rules, may not be associated persons of J.P. Morgan Securities LLC, and may not be subject to FINRA Rule 2241 or 2242 restrictions on communications with covered companies, public appearances, and trading securities held by a research analyst account.

Other Disclosures

J.P. Morgan is a marketing name for investment banking businesses of JPMorgan Chase & Co. and its subsidiaries and affiliates worldwide.

UK MIFID FICC research unbundling exemption: UK clients should refer to UK MIFID Research Unbundling exemption for details of J.P. Morgan's implementation of the FICC research exemption and guidance on relevant FICC research categorisation.

All research material made available to clients are simultaneously available on our client website, J.P. Morgan Markets, unless specifically permitted by relevant laws. Not all research content is redistributed, e-mailed or made available to third-party aggregators. For all research material available on a particular stock, please contact your sales representative.

Any long form nomenclature for references to China; Hong Kong; Taiwan; and Macau within this research material are Mainland China; Hong Kong SAR (China); Taiwan (China); and Macau SAR (China).

J.P. Morgan Research may, from time to time, write on issuers or securities targeted by economic or financial sanctions imposed or administered by the governmental authorities of the U.S., EU, UK or other relevant jurisdictions (Sanctioned Securities). Nothing in this report is intended to be read or construed as encouraging, facilitating, promoting or otherwise approving investment or dealing in such Sanctioned Securities. Clients should be aware of their own legal and compliance obligations when making investment decisions.

Any digital or crypto assets discussed in this research report are subject to a rapidly changing regulatory landscape. For relevant regulatory advisories on crypto assets, including bitcoin and ether, please see https://www.jpmorgan.com/disclosures/cryptoasset-disclosure.

The author(s) of this research report may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so.

Exchange-Traded Funds (ETFs): J.P. Morgan Securities LLC ("JPMS") acts as authorized participant for substantially all U.S.-listed ETFs. To the extent that any ETFs are mentioned in this report, JPMS may earn commissions and transaction-based compensation in connection with the distribution of those ETF shares and may earn fees for performing other trade-related services, such as securities lending to short sellers of the ETF shares. JPMS may also perform services for the ETFs themselves, including acting as a broker or dealer to the ETFs. In addition, affiliates of JPMS may perform services for the ETFs, including trust, custodial, administration, lending, index calculation and/or maintenance and other services.

Options and Futures related research: If the information contained herein regards options- or futures-related research, such information is available only to persons who have received the proper options or futures risk disclosure documents. Please contact your J.P. Morgan Representative or visit https://www.theocc.com/components/docs/riskstoc.pdf for a copy of the Option Clearing Corporation's Characteristics and Risks of Standardized Options or https://www.finra.org/sites/default/files/2020-08/Security_Futures_Risk_Disclosure_Statement_2020.pdf for a copy of the Security Futures Risk Disclosure Statement.

Changes to Interbank Offered Rates (IBORs) and other benchmark rates: Certain interest rate benchmarks are, or may in the future become, subject to ongoing international, national and other regulatory guidance, reform and proposals for reform. For more information, please consult: https://www.jpmorgan.com/global/disclosures/interbank_offered_rates

Notification for Credit Ratings: If this material includes credit ratings, such credit ratings provided by Japan Credit Rating Agency, Ltd. (JCR) and Rating and Investment Information, Inc. (R&I), are credit ratings provided by Registered Credit Rating Agencies (credit rating agencies registered under the Financial Instruments and Exchange Law of Japan (FIEL)). With respect to credit ratings that are provided by credit rating agencies other than JCR and R&I and have no stipulation that such credit ratings are provided by Registered Credit Rating Agencies, this means that such credit ratings are Non Registered Ratings (credit ratings provided by credit rating agencies not registered under the FIEL). Among the Non Registered Ratings, with respect to those credit ratings provided by S&P Global Ratings (S&P), Moody's Investors Service (Moody's), or Fitch Ratings (Fitch), prior to making investment decision based on such Non Registered Ratings, please carefully read the "Explanation Letter regarding Non Registered Ratings" for the corresponding credit rating agency, which we separately have sent or will send.

Private Bank Clients: Where you are receiving research as a client of the private banking businesses offered by JPMorgan Chase & Co. and its subsidiaries ("J.P. Morgan Private Bank"), research is provided to you by J.P. Morgan Private Bank and not by any other division of J.P. Morgan, including, but not limited to, the J.P. Morgan Corporate and Investment Bank and its Global Research division.

Legal entity responsible for the production and distribution of research: The legal entity identified below the name of the Reg AC Research Analyst who authored this material is the legal entity responsible for the production of this research. Where multiple Reg AC Research Analysts authored this material with different legal entities identified below their names, these legal entities are jointly responsible for the production of this research. Where more than one legal entity is listed under an analyst's name, the first legal entity is responsible for the production unless stated otherwise. Research Analysts from various J.P. Morgan affiliates may have contributed to the production of this material but may not be licensed to carry out regulated activities in your jurisdiction (and do not hold themselves out as being able to do so). Unless otherwise stated below in the legal entity disclosures, this material has been distributed by the legal entity responsible for production, or where more than one legal entity is listed under the analyst's name, the first legal entity will be responsible for distribution. If you have any queries, please contact the relevant Research Analyst in your jurisdiction or the entity in your jurisdiction that has distributed this research material.

Legal Entities Disclosures and Country-/Region-Specific Disclosures:
Argentina: JPMorgan Chase Bank N.A Sucursal Buenos Aires is regulated by Banco Central de la República Argentina ("BCRA"- Central Bank of Argentina) and Comisión Nacional de Valores ("CNV"- Argentinian Securities Commission - ALYC y AN Integral N°51).

Australia: J.P. Morgan Securities Australia Limited ("JPMSAL") (ABN 61 003 245 234/AFS Licence No: 238066) is regulated by the Australian Securities and Investments Commission and is a Market Participant of ASX Limited, a Clearing and Settlement Participant of ASX Clear Pty Limited and a Clearing Participant of ASX Clear (Futures) Pty Limited. This material is issued and distributed in Australia by or on behalf of JPMSAL only to "wholesale clients" (as defined in section 761G of the Corporations Act 2001). A list of all financial products covered can be found by visiting https://www.jpmm.com/research/disclosures. J.P. Morgan seeks to cover companies of relevance to the domestic and international investor base across all Global Industry Classification Standard (GICS) sectors, as well as across a range of market capitalisation sizes. If applicable, in the course of conducting public side due diligence on the subject company(ies), the Research Analyst team may at times perform such diligence through corporate engagements such as site visits, discussions with company representatives, management presentations, etc. Research issued by JPMSAL has been prepared in accordance with J.P. Morgan Australia's Research Independence Policy which can be found at the following link: J.P. Morgan Australia - Research Independence Policy.

Brazil: Banco J.P. Morgan S.A. is regulated by the Comissao de Valores Mobiliarios (CVM) and by the Central Bank of Brazil. Ombudsman J.P. Morgan: 0800-7700847 / 0800-7700810 (For Hearing Impaired) / ouvidoria.jp.morgan@jpmchase.com.

Canada: J.P. Morgan Securities Canada Inc. is a registered investment dealer, regulated by the Canadian Investment Regulatory Organization and the Ontario Securities Commission and is the participating member on Canadian exchanges. This material is distributed in Canada by or on behalf of J.P.Morgan Securities Canada Inc.

Chile: Inversiones J.P. Morgan Limitada is an unregulated entity incorporated in Chile.

China: J.P. Morgan Securities (China) Company Limited has been approved by CSRC to conduct the securities investment consultancy business.

Colombia: Banco J.P. Morgan Colombia S.A. is supervised by the Superintendencia Financiera de Colombia (SFC). Any reference in this material to products or services offered abroad by entities other than the Bank in Colombia is included exclusively for descriptive purposes. Such references do not constitute, and should not be construed as, promotional activity or the provision of financial products or services within

Colombian territory, as defined under applicable Colombian regulation.

Dubai International Financial Centre (DIFC): JPMorgan Chase Bank, N.A., Dubai Branch is regulated by the Dubai Financial Services Authority (DFSA) and its registered address is Dubai International Financial Centre - The Gate, West Wing, Level 3 and 9 PO Box 506551, Dubai, UAE. This material has been distributed by JP Morgan Chase Bank, N.A., Dubai Branch to persons regarded as professional clients or market counterparties as defined under the DFSA rules.

European Economic Area (EEA): Unless specified to the contrary, research is distributed in the EEA by J.P. Morgan SE ("JPM SE"), which is authorised as a credit institution by the Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin) and jointly supervised by the BaFin, the German Central Bank (Deutsche Bundesbank) and the European Central Bank (ECB). JPM SE is a company headquartered in Frankfurt with registered address at TaunusTurm, Taunustor 1, Frankfurt am Main, 60310, Germany. The material has been distributed in the EEA to persons regarded as professional investors (or equivalent) pursuant to Art. 4 para. 1 no. 10 and Annex II of MiFID II and its respective implementation in their home jurisdictions ("EEA professional investors"). This material must not be acted on or relied on by persons who are not EEA professional investors. Any investment or investment activity to which this material relates is only available to EEA relevant persons and will be engaged in only with EEA relevant persons.

Hong Kong: J.P. Morgan Securities (Asia Pacific) Limited (CE number AAJ321) is regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission in Hong Kong, and J.P. Morgan Broking (Hong Kong) Limited (CE number AAB027) is regulated by the Securities and Futures Commission in Hong Kong. JP Morgan Chase Bank, N.A., Hong Kong Branch (CE Number AAL996) is regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission, is organized under the laws of the United States with limited liability. Where the distribution of this material is a regulated activity in Hong Kong, the material is distributed in Hong Kong by or through J.P. Morgan Securities (Asia Pacific) Limited and/or J.P. Morgan Broking (Hong Kong) Limited.

India: J.P. Morgan India Private Limited (Corporate Identity Number - U67120MH1992FTC068724), having its registered office at J.P. Morgan Tower, Off. C.S.T. Road, Kalina, Santacruz - East, Mumbai – 400098, is registered with the Securities and Exchange Board of India (SEBI) as a 'Research Analyst' having registration number INH000001873. J.P. Morgan India Private Limited is also registered with SEBI as a member of the National Stock Exchange of India Limited and the Bombay Stock Exchange Limited (SEBI Registration Number – INZ000239730) and as a Merchant Banker (SEBI Registration Number - MB/INM000002970). Telephone: 91-22-6157 3000, Facsimile: 91-22-6157 3990 and Website: http://www.jpmipl.com. JPMorgan Chase Bank, N.A. - Mumbai Branch is licensed by the Reserve Bank of India (RBI) (Licence No. 53/ Licence No. BY.4/94; SEBI - IN/CUS/014/ CDSL : IN-DP-CDSL-444-2008/ IN-DP-NSDL-285-2008/ INBI00000984/ INE231311239) as a Scheduled Commercial Bank in India, which is its primary license allowing it to carry on Banking business in India and other activities, which a Bank branch in India are permitted to undertake. For non-local research material, this material is not distributed in India by J.P. Morgan India Private Limited. Compliance Officer: Ashutosh Sharma; ashutosh.j.sharma@jpmchase.com; +912261575002. Grievance Officer: Ramprasadh K, jpmipl.research.feedback@jpmorgan.com; +912261573000. Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors. Please visit Terms and Conditions and Most Important Terms and Conditions (MITC). The annual Compliance audit report is available at http://www.jpmipl.com/#research.

Indonesia: PT J.P. Morgan Sekuritas Indonesia is a member of the Indonesia Stock Exchange and is registered and supervised by the Otoritas Jasa Keuangan (OJK).

Korea: J.P. Morgan Securities (Far East) Limited, Seoul Branch, is a member of the Korea Exchange (KRX). JPMorgan Chase Bank, N.A., Seoul Branch, is licensed as a branch office of foreign bank (JPMorgan Chase Bank, N.A.) in Korea. Both entities are regulated by the Financial Services Commission (FSC) and the Financial Supervisory Service (FSS). For non-macro research material, the material is distributed in Korea by or through J.P. Morgan Securities (Far East) Limited, Seoul Branch.

Japan: JPMorgan Securities Japan Co., Ltd. and JPMorgan Chase Bank, N.A., Tokyo Branch are regulated by the Financial Services Agency in Japan.

Malaysia: This material is issued and distributed in Malaysia by JPMorgan Securities (Malaysia) Sdn Bhd (18146-X), which is a Participating Organization of Bursa Malaysia Berhad and holds a Capital Markets Services License issued by the Securities Commission in Malaysia.

Mexico: J.P. Morgan Casa de Bolsa, S.A. de C.V., J.P. Morgan Grupo Financiero is member of the Mexican Stock Exchange ("Bolsa Mexicana de Valores") and the Institutional Stock Exchange ("Bolsa Institucional de Valores"), and it is authorized to act as a broker dealer by the National Banking and Securities Exchange Commission ("Comisión Nacional Bancaria y de Valores").

New Zealand: This material is issued and distributed by JPMSAL in New Zealand only to "wholesale clients" (as defined in the Financial Markets Conduct Act 2013). JPMSAL is registered as a Financial Service Provider under the Financial Service providers (Registration and Dispute Resolution) Act of 2008.

Philippines: J.P. Morgan Securities Philippines Inc. is a Trading Participant of the Philippine Stock Exchange and a member of the Securities Clearing Corporation of the Philippines and the Securities Investor Protection Fund. It is regulated by the Securities and Exchange Commission.

Singapore: This material is issued and distributed in Singapore by or through J.P. Morgan Securities Singapore Private Limited (JPMSS) [MDDI (P) 057/08/2025 and Co. Reg. No.: 199405335R], which is a member of the Singapore Exchange Securities Trading Limited, and/or JPMorgan Chase Bank, N.A., Singapore branch (JPMCB Singapore), both of which are regulated by the Monetary Authority of Singapore. This material is issued and distributed in Singapore only to accredited investors, expert investors and institutional investors, as defined in Section 4A of the Securities and Futures Act, Cap. 289 (SFA). This material is not intended to be issued or distributed to any retail investors or any other investors that do not fall into the classes of “accredited investors,” “expert investors” or “institutional investors,” as defined under Section 4A of the SFA. Recipients of this material in Singapore are to contact JPMSS or JPMCB Singapore in respect of any matters arising from, or in connection with, the material.

South Africa: J.P. Morgan Equities South Africa Proprietary Limited and JPMorgan Chase Bank, N.A., Johannesburg Branch are members of the Johannesburg Securities Exchange and are regulated by the Financial Services Conduct Authority (FSCA).

Taiwan: J.P. Morgan Securities (Taiwan) Limited is a participant of the Taiwan Stock Exchange (company-type) and regulated by the Taiwan Securities and Futures Bureau. Material relating to equity securities is issued and distributed in Taiwan by J.P. Morgan Securities (Taiwan) Limited, subject to the license scope and the applicable laws and the regulations in Taiwan. **To the extent that J.P. Morgan Securities (Taiwan) Limited produces research materials on securities not listed on the Taiwan Stock Exchange or Taipei Exchange (“Non-Taiwan Listed Securities”), these materials shall not constitute securities recommendations for the purpose of applicable Taiwan regulations, and, for the avoidance of doubt, J.P. Morgan Securities (Taiwan) Limited does not act as broker for Non-Taiwan Listed Securities.** According to Paragraph 2, Article 7-1 of Operational Regulations Governing Securities Firms Recommending Trades in Securities to Customers (as amended or supplemented) and/or other applicable laws or regulations, please note that the recipient of this material is not permitted to engage in any activities in connection with the material that may give rise to conflicts of interests, unless otherwise disclosed in the “Important Disclosures” in this material.

Thailand: This material is issued and distributed in Thailand by JPMorgan Securities (Thailand) Ltd., which is a member of the Stock Exchange of Thailand and is regulated by the Ministry of Finance and the Securities and Exchange Commission. The registered address is 548 One City Center Building, 50th Floor, Ploenchit Road, Lumphini, Pathum Wan, Bangkok 10330.

UK: Research is produced in the UK by J.P. Morgan Securities plc (“JPMS plc”) which is a member of the London Stock Exchange and is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority or J.P. Morgan Markets Limited (“JPMML Ltd”) which is authorised and regulated by the Financial Conduct Authority. Unless specified to the contrary, this material is distributed in the UK by JPMS plc and is directed in the UK only to: (a) persons having professional experience in matters relating to investments falling within article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) (Order) 2005 (“the FPO”); (b) persons outlined in article 49 of the FPO (high net worth companies, unincorporated associations or partnerships, the trustees of high value trusts, etc.); or (c) any persons to whom this communication may otherwise lawfully be made; all such persons being referred to as "UK relevant persons". This material must not be acted on or relied on by persons who are not UK relevant persons. Any investment or investment activity to which this material relates is only available to UK relevant persons and will be engaged in only with UK relevant persons. A description of J.P. Morgan EMEA’s policy for prevention and avoidance of conflicts of interest related to the production of Research can be found at the following link: J.P. Morgan EMEA - Research Independence Policy.

U.S.: J.P. Morgan Securities LLC (“JPMS”) is a member of the NYSE, FINRA, SIPC, and the NFA. JPMorgan Chase Bank, N.A. is a member of the FDIC. Material published by non-U.S. affiliates is distributed in the U.S. by JPMS who accepts responsibility for its content.

General: Additional information is available upon request. The information in this material has been obtained from sources believed to be reliable. While all reasonable care has been taken to ensure that the facts stated in this material are accurate and that the forecasts, opinions and expectations contained herein are fair and reasonable, JPMorgan Chase & Co. or its affiliates and/or subsidiaries (collectively J.P. Morgan) make no representations or warranties whatsoever to the completeness or accuracy of the material provided, except with respect to any disclosures relative to J.P. Morgan and the Research Analyst's involvement with the issuer that is the subject of the material. Accordingly, no reliance should be placed on the accuracy, fairness or completeness of the information contained in this material. There may be certain discrepancies with data and/or limited content in this material as a result of calculations, adjustments, translations to different languages, and/or local regulatory restrictions, as applicable. These discrepancies should not impact the overall investment analysis, views and/or recommendations of the subject company(ies) that may be discussed in the material. Artificial intelligence tools may have been used in the preparation of this material, including assisting in data analysis, pattern recognition, and content drafting for research material. J.P. Morgan accepts no liability whatsoever for any loss arising from any use of this material or its contents, and neither J.P. Morgan nor any of its respective directors, officers or employees, shall be in any way responsible for the contents hereof, apart from the liabilities and responsibilities that may be imposed on them by the relevant regulatory authority in the jurisdiction in question, or the regulatory regime thereunder. Opinions, forecasts or projections contained in this material represent J.P. Morgan's current opinions or judgment as of the date of the material only and are therefore subject to change without notice. Periodic updates may be provided on companies/industries based on company-specific developments or announcements, market conditions or any other publicly available information. There can be no assurance that future results or events will be consistent with any such opinions, forecasts or projections, which represent only one possible outcome. Furthermore, such opinions, forecasts or projections are subject to certain risks, uncertainties and assumptions that have not been verified, and future actual results or events could differ materially. The value of, or income from, any investments referred to in this material may fluctuate and/or be affected by changes in exchange rates. All pricing is indicative as of the close of market for the securities discussed, unless otherwise stated. Past performance is not indicative of future results. Accordingly, investors may receive back less than originally invested. This material is not intended as an offer or solicitation for the purchase or sale of any financial instrument. The opinions and recommendations herein do not take into account individual client circumstances, objectives, or needs and are not intended as recommendations of particular securities, financial instruments or strategies to particular clients. This material may include views on structured securities, options, futures and other derivatives. These are complex instruments, may involve a high degree of risk and may be appropriate investments only for sophisticated investors who are capable of understanding and assuming the risks involved. The recipients of this material must make their own independent decisions regarding any securities or financial instruments mentioned herein and should seek advice from such independent financial, legal, tax or other adviser as they deem necessary. J.P. Morgan may trade as a principal on the basis of the Research Analysts' views and research, and it may also engage in transactions for its own account or for its clients' accounts in a manner inconsistent with the views taken in this material, and J.P. Morgan is under no obligation to ensure that such other communication is brought to the attention of any recipient of this material. Others within J.P. Morgan, including Strategists, Sales staff and other Research Analysts, may take views that are inconsistent with those taken in this material. Employees of J.P. Morgan not involved in the preparation of this material may have investments in the securities (or derivatives of such securities) mentioned in this material and may trade them in ways different from those discussed in this material. This material is not an advertisement for or marketing of any issuer, its products or services, or its securities in any jurisdiction.

Confidentiality and Security Notice: This transmission may contain information that is privileged, confidential, legally privileged, and/or exempt from disclosure under applicable law. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution, or use of the information contained herein (including any reliance thereon) is STRICTLY PROHIBITED. Although this transmission and any attachments are believed to be free of any virus or other defect that might affect any computer system into which it is received and opened, it is the responsibility of the recipient to ensure that it is virus free and no responsibility is accepted by JPMorgan Chase & Co., its subsidiaries and affiliates, as applicable, for any loss or damage arising in any way from its use. If you received this transmission in error, please immediately contact the sender and destroy the material in its entirety, whether in electronic or hard copy format. This message is subject to electronic monitoring: https://www.jpmorgan.com/disclosures/email

MSCI: Certain information herein ("Information") is reproduced by permission of MSCI Inc., its affiliates and information providers ("MSCI") ©2026. No reproduction or dissemination of the Information is permitted without an appropriate license. MSCI MAKES NO EXPRESS OR IMPLIED WARRANTIES (INCLUDING MERCHANTABILITY OR FITNESS) AS TO THE INFORMATION AND DISCLAIMS ALL LIABILITY TO THE EXTENT PERMITTED BY LAW. No Information constitutes investment advice, except for any applicable Information from MSCI ESG Research. Subject also to msci.com/disclaimer

Sustainalytics: Certain information, data, analyses and opinions contained herein are reproduced by permission of Sustainalytics and: (1) includes the proprietary information of Sustainalytics; (2) may not be copied or redistributed except as specifically authorized; (3) do not constitute investment advice nor an endorsement of any product or project; (4) are provided solely for informational purposes; and (5) are not warranted to be complete, accurate or timely. Sustainalytics is not responsible for any trading decisions, damages or other losses related to it or its use. The use of the data is subject to conditions available at https://www.sustainalytics.com/legal-disclaimers. ©2026 Sustainalytics. All Rights Reserved.

"Other Disclosures" last revised May 16, 2026.

Completed 25 May 2026 11:15 PM HKT

Disseminated 25 May 2026 11:15 PM HKT