

Greater China EV and EV battery

China “Future Car” Review #36: XPeng X9 – a flagship MPV aims high

Industry Overview

Official price in line with expectation; 30k pre-sales orders

On January 1, XPeng officially launched X9, its flagship premium BEV MPV. XPeng X9 has a wheelbase of 3,160mm, with 5,293mm/1,988mm/1,785mm in length, width, and height. The retail price of the X9 will be in the range of RMB359.8-419.8k, lower than its pre-sales prices starting from RMB388k, but in line with expectations. X9 received 30k+ refundable orders during pre-sales period (17 Nov. to 31 Dec.). Competitive models in terms of pricing and segmentation are SAIC-GM Buick GL8, Denza D9, GAC Toyota Sienna, GAC Trumpchi E9, DF VOYAH Dreamer and GWM WEY Gaoshan. We see XPeng X9 performing better in terms of space in car, driving range, and ADAS. We estimate X9's GPM could reach mid-teen, based on its listing price.

A multi-use vehicle with features of SUVs + MPVs

X9 has electric foldable seats in the third-row, which offers one-click transformation to large 4-seater SUV and huge space (1,846L) at the back. Other highlights of X9 include: (1) active rear-wheel steering system, enabling maximum turning angle $\pm 5^\circ$ and minimum turning radius 5.4m; (2) intelligent dual-chamber air suspension, with 40% increase in adjustment range of spring stiffness, 90mm maximum suspension adjustable range, 25% decrease in speed bump impact strength; (3) front and rear integrated die-casting aluminum body with 46,000Nm/deg torsional rigidity; (4) comfort in-cabin space, with a 21.4 inch screen, heat & cold refrigerators, central air conditioner and zero-gravity seats.

XNGP expansion to 243 cities; aims 10k charging stations

X9's Max version is equipped with XNGP (full-scenario ADAS), supported by two NVIDIA DRIVE Orin chips with 508 TOPS and two LiDAR. XNGP will expand XNGP coverage in 243 cities from January 2, 2024. Further, XPeng aims to release automated parking functions (cars can be parked without drivers in the vehicle) in 2024. X9 is based on 800V high-voltage platform and adopts 3C battery, supporting 20min fast charging (from 10% to 80%). XPeng self-operated supercharging network has covered 406 cities by end-2023, and it aims to operate 10k+ self-operated charging stations by end-2026.

Exhibit 1: MPV's average monthly sales

We summarize full-size MPV average monthly retail sales below

	2022	YT-Nov
SAIC GM Buick GL8 (ICEV)	8,854	10,003
BYD Denza D9 (PHEV)	4,676	8,257
BYD Denza D9 (BEV)	NA	536
GAC Toyota Sienna (ICEV)	6,226	6,382
GAC Trumpchi E9	NA	2,102
DF VOYAH Dreamer	1,008	1,161
GWM WEY Gaoshan	NA	452

Source: CIRC

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Equity
Greater China
Autos

Ming Hsun Lee, CFA >>
Research Analyst
Merrill Lynch (Hong Kong)
+852 3508 5006
minghsun.lee@bofa.com

Jessie Lo >>
Research Analyst
Merrill Lynch (Singapore)
+65 6678 1134
jessie.lo@bofa.com

Joey Yang, CFA >>
Research Analyst
Merrill Lynch (Hong Kong)
+852 3508 4021
joey.z.yang@bofa.com

BEV: Battery electric vehicle

MPV: Multi-purpose vehicle

SUV: Sport utility vehicle

CLTC: China Light-Duty Vehicle Test Cycle

XNGP: XPeng navigation guided pilot

ADAS: advanced driver assistance system

LiDAR: Light Detection and Ranging

ICEV: internal combustion engine vehicle

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Timestamp: 01 January 2024 12:30PM EST

Exhibit 2: XPeng X9's specs comparison with EV peers' products

We see XPeng X9 performing better in terms of driving range and ADAS.

	XPeng X9	BYD Denza D9	BYD Denza D9	DF VOYAH Dreamer	GAC Trumpchi E9	GWM WEY Gaoshan	SAIC GM Buick GL8	GAC Toyota Sienna
Launch Time	2024.1	2023.6	2022.8	2023.10	2023.5	2023.10	2022.8	2023.3
Powertrain	BEV	PHEV	BEV	PHEV	PHEV	PHEV	ICEV + 48V	HEV
MSRP (RMB)	359.8-419.8k	345.8-445.8k	395.8-465.8k	339.9-419.9k	329.8-389.8k	335.8-408.8k	232.9-473.9k	309.8-411.8k
Length/Width/Height (mm)	5293/1988/1785	5250/1960/1920	5250/1960/1920	5315/1985/1820	5193/1893/1823	5045/1960/1900 5405/1960/1890	5219/1878/1799	5165/1995/1765
Wheelbase (mm)	3160	3110	3110	3200	3070	3085/3275	3088	3060
Max No of Seats	7	7	7	7	7	7	7	7
Electric Motor	Permanent magnet synchronous	Permanent magnet synchronous	Permanent magnet synchronous motor	Permanent magnet synchronous	Permanent magnet synchronous	Permanent magnet synchronous	NA	Permanent magnet synchronous
Horse Power (hp)	503	301	374	571	373	487	237	246
Maximum Power (kw)	370	221	275	420	274	358	174	181
Maximum Torque (N.m)	450	571	470	840	630	762	350	NA
Acceleration time from 0 to 100km/h (s)	5.7/7.7	9.5	6.9	5.9	8.8	5.7	9.5/9.8/9.9	NA
Top Speed (km/h)	200	180	180	203	175	170	195	180
Capacity of Battery (kWh)	84.5/101.5	11.1/20.4	103.4	43	25.6	37.96	NA	NA
Driving Range (km)	610/640/702 (CLTC)	50/98 (NEDC)	600 (CLTC)	236 (CLTC)	136 (CLTC)	140 (WLTC)	NA	NA
Electricity Consumption (kWh/100km)	16.2/16.3/17.7	24.1	18.4	NA	21	NA	NA	NA
Fuel consumption under low battery mode (L/100km)	NA	5.9/6.1	NA	5.36	6.05	7.2	NA	NA
Autonomous Driving	Level 3	Level 2+	Level 2+	Level 2+	Level 2+	Level 2+	Level 2	Level 2

Source: Company report *Note that we highlighted the model specs that outperform among most similar peers with red frame

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Exhibit 3: XPeng X9's external design

XPeng X9 is a flagship MPV



Source: Company report

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Exhibit 4: XPeng X9's internal design

X9 measures 5,293mm/1,988mm/1,785mm in length, width, and height.



Source: Company report

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Exhibit 5: China “Future Car” Review Series summary

We summarized the report under “Future Car” review series below

Date	OEM	Model	Report link
5/20/2022	BYD	Seal	#1: BYD's Seal
5/20/2022	GWM	Ballet Cat	#2: GWM's Ora Ballet Mao
6/15/2022	NIO	ES7+2022 ES8/ES6/EC6	#3: NIO ES7 + 2022 ES8/ES6/EC6
6/21/2022	Li Auto	L9	#4: Li Auto L9: "ideal" family-use SUV
7/4/2022	AITO	M7	#5: AITO M7: large-size SUV + HarmonyOS system
8/9/2022	Changan	Avatr 11	#7: Changan Avatr 11 - powered by Huawei
8/22/2022	GWM	Haval H6 DHT	#8: GWM Haval H6 DHT aims high in PHEV market
9/6/2022	AITO	M5	#9: AITO M5 BEV: first BEV under AITO brand
9/21/2022	XPeng	G9	#10: XPeng G9, a flagship SUV
9/30/2022	Li Auto	L7/L8	#11: Li Auto L8/L7: competitive SUVs
10/31/2022	GWM	Ora Shandian Mao	#12: GWM's Ora Shandian Mao
12/9/2022	BYD	Frigate 07	#13: BYD's Frigate 07 aims high
2/8/2023	Li Auto	L7	#14: Li Auto L7 - a five-seater family SUV
2/10/2023	BYD	Qin Plus	#15: BYD Qin plus champion edition: competitive price
2/10/2023	SAIC	IM LS7	#16: SAIC IM LS7
3/10/2023	XPeng	P7i	#17: XPeng P7i
3/16/2023	BYD	Han EV/Tang DM-i	#18: BYD Han EV / Tang DM-i champion edition
4/13/2023	GWM	WEY Lanshan DHT PHEV	#19: GWM's WEY Lanshan DHT PHEV
5/15/2023	GWM	Haval Xiaolong/Xiaolong Max	#20: Haval Xiaolong / Xiaolong Max
5/18/2023	BYD	Han DM-i/DM-p	#21: BYD Han DM-i champion/ DM-p Zhanshen edition
5/24/2023	NIO	2023 ES6	#22: NIO 2023 ES6 based on NT2.0 platform
5/25/2023	BYD	Song Pro DM-I Champion	#23: BYD Song Pro DM-i champion version
5/31/2023	BYD	Yuan Pro EV	#24: BYD Yuan Pro EV – a competitive A0-class SUV
6/29/2023	XPeng	G6	#25: XPeng G6, mid-sized SUV
7/3/2023	Denza	N7	#26: Denza's second model N7, a mid-sized SUV
9/12/2023	AITO	AITO M7	#27: AITO new M7 – competitive pricing
9/12/2023	BYD	Yuan Plus EV	#28: BYD's Yuan Plus Champion compact SUV
9/19/2023	XPeng	G9	#29: XPeng new G9 – competitive pricing & spec
9/20/2023	BYD	Yangwang U8	#30: BYD's Yangwang U8 – a luxurious off-road SUV
10/10/2023	GWM	Haval Menglong	#31: Haval Menglong Hi-4
10/18/2023	GWM	WEY Gaoshan	#32: WEY Gaoshan
11/9/2023	BYD	Bao 5	#33: Fang Cheng Bao 5 – hybrid off-road SUV
12/15/2023	BYD	Song L	#34: BYD Song L – B-class premium electric SUV
12/23/2023	NIO	ET9	2023 NIO Day: unveiling latest technology and ET9
12/26/2023	AITO	M9	#35: AITO M9 – Huawei's flagship full-sized SUV

Source: BofA Global Research, company report

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